Record

Nos. 1945 —

Collection number book
of F. R. Fosberg

Nos. 24225 — 24941

Descriptive passages
transcribed for Miss Ohlen

Pages

CAROLINE ISLANDS

MARIANA ISLANDS

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Collection and Field Note Book

No. 14

Nov. 25, 1945 - June 9, 1946

(Nos. 24225 - 24941)

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1 Beregismar

2 Ujos

3 Kalekek

4 Bele

5 Nen

6 Koro

7 Kiran

8 Ujoj atok

9 Tearoro

10 Ugyo kulak
11 Motok
12 Kerak
13 Kiram
14 Kus
15 Kmar kemat
16 Motokatok
17 [illegible]
18 Tamam
19 Atak

Office Memorandum • UNITED STATES GOVERNMENT

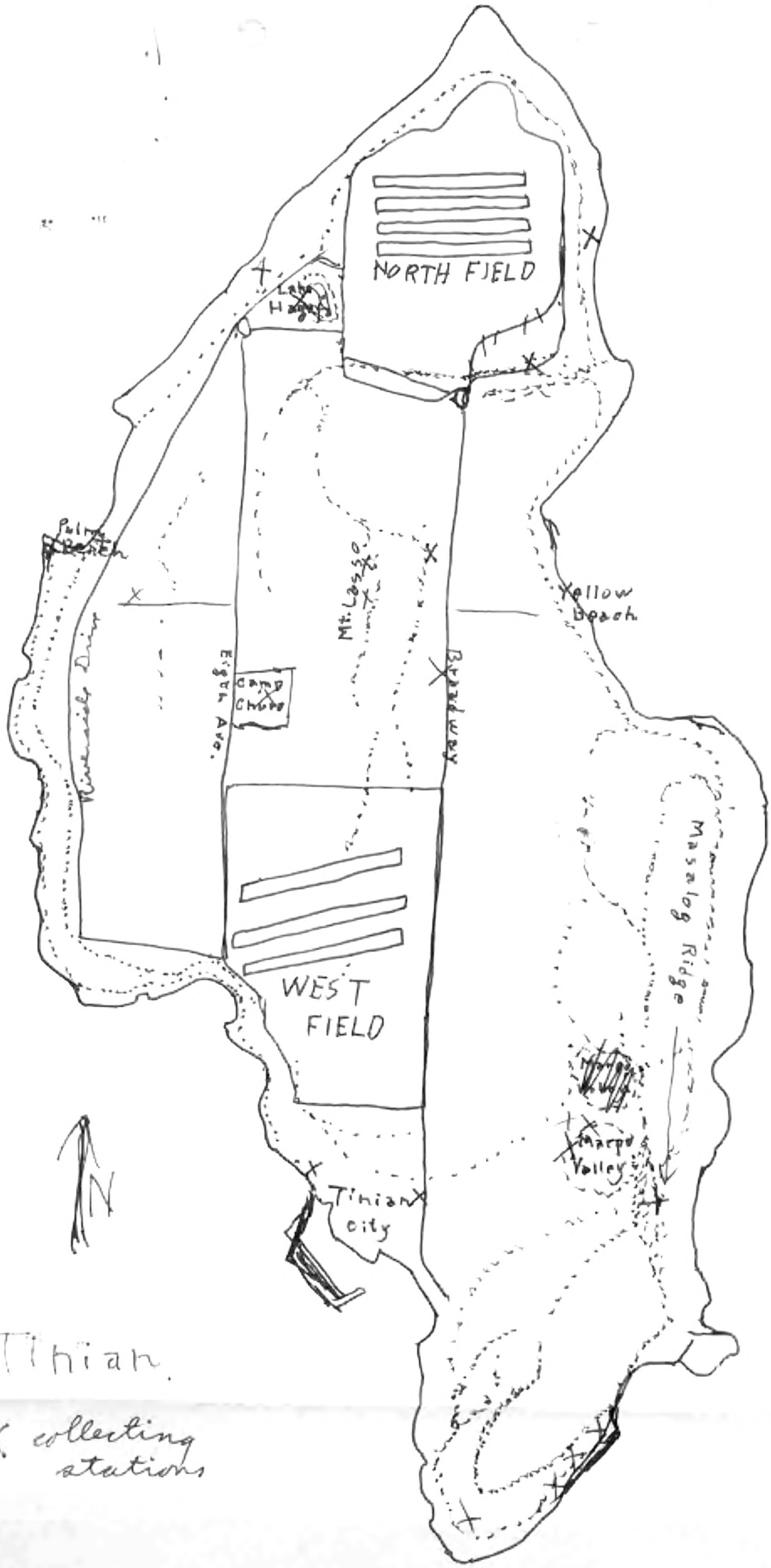
TO : Dr. John A. Stevenson

DATE: July 11, 1949

FROM : F. H. Parkany

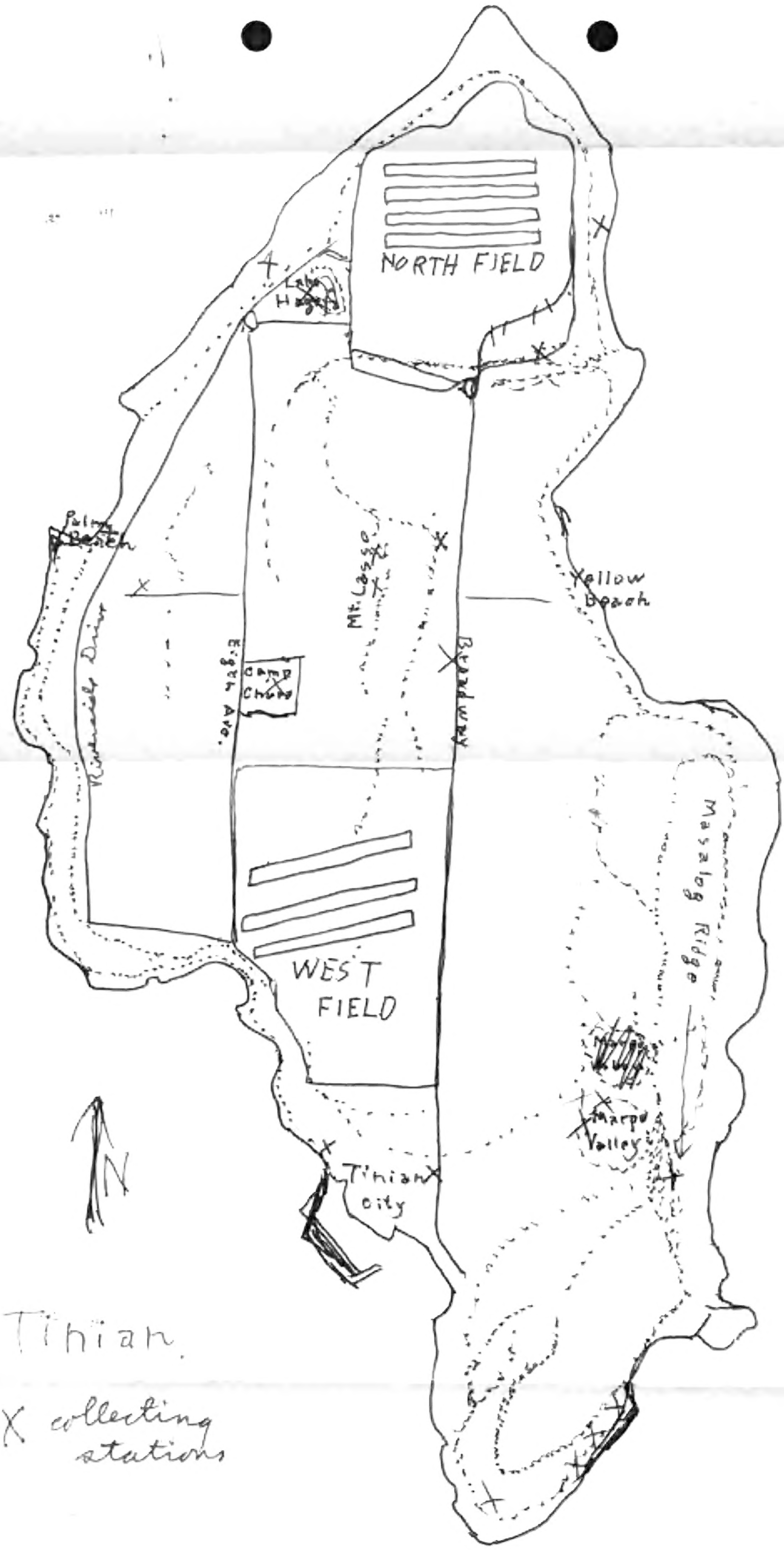
SUBJECT: Collection of Microscopian Fungi

There are ~~eleven~~ twelve specimens of fungi from Minnesota from the U. S. D. C. collection. The specimens belong ~~due~~ to the U. S. National Herbarium, so you may put them in the collection. I would appreciate determinations of any that are identifiable. Particularly I would like a name for the big sclerotium with the fruiting body.



Tinian.

X collecting stations



Tinian.

X collecting stations

1945 —

Collection number book
of T R Fosberg

Nos 24225 — 24941

4

1945 - Virginia

Nov. 25 - Lee Boulevard
north of Fairfax
gentle slope wooded principally
with Fagus grandifolia
24225 Selaginella apoda — prostrate, pale green

Dec. 3 - Sleepy Hollow, 1 mi.
s. of Falls Church, Fairfax Co.
26 Quercus phellos L. — tree 20 m. tall, 12 dm. thick
edge of pasture in cleared
bottom land

Dec. 3 - 2.3 mi. s.f.e. of main
intersection, Fairfax, Fairfax Co.
dense pine forest (about 30 years old)
with little underbrush, gentle slope.
27 Lycopodium complanatum var. flabelliforme — prostrate, extensively
small patch — creeping, sterile.
28 Polystichum acrostichoides — rhizome erect, fronds
occasional — prostrate or ascending.
29 Chimaphila maculata — erect from prostrate
common — underground rhizome, leaves
dark green, central portion
whitish.
30 Chimaphila umbellata — erect from prostrate underground
local — rhizome, leaves dark green,
glossy.
31 Mitchella repens — prostrate, dull, dark
abundant — green, berries scarlet.

Dec. 3 - along Turkeycock Run,
1/3 mi. n. of Fairland, 6 mi. w. of
Alexandria, Fairfax Co.
Magnolia bog (Prof. Bot. for. Wash.

sphagnum on white gravel
oozing water.

24232 Lycopodium obscurum — erect from prostrate underground rhizomes.
common locally, large patches — spike straw colored

33 Lycopodium lucidulum — erect, dark green
rare, local.

34 Alnus serrulata Willd. — shrub 3 m. tall
common

35 Rhus vernix — small tree 4 m. tall
common

36 Magnolia virginiana — small tree 6 m. tall, a few leaves persisting, white beneath.
common, characteristic
Tree of this type of bog.

Nov. 26 - Washington, D.C.
12th + C St. S.W.
in edge of lawn along sidewalk
37 Polygonum — fls. pink.

Dec. 8, 1945 - Bird Sanctuary
Potomac River, Arlington
thicket at edge of slough
38 Ailanthus altissima — small sapling
39 Platanus occidentalis — small tree 4 m. tall, 4 cm. thick, bark smooth, exfoliating.

Dec. 9, 1945 - Sleepy Hollow, 1 mi. s. of Falls Church, Fairfax Co.
thickly wooded bottom-land, low second-growth woods.
40 Amelanchier — small shrubby tree, 3 m. tall.
41 Acer rubrum — small tree, 4 m. tall
42 Liquidamba styraciflua — small tree 6 m. tall, branches green

Dec. 30, 1945 — same

24243 Morus

44 Viburnum prunifolium
common

-1946-

Feb. 3 Roaches Run
Bird Sanct., Potomac
River, Arlington Co.

45 Ailanthus altissima
roadside thicket

March 10 Sleepy Hollow, 1 mi.
s. of Falls Church, Fairfax Co.

46 Catalpa
brushy old field

47 Crataegus [Discarded, sterile, winter specimen]
scattered trees in pasture

48

on dead logs of Acer rubrum,
Quercus palustris, Ulmus americana

sapling, ~~to~~ much branched, 3 m. tall

tree 5 m. tall, 12 cm. thick,
surrounded by bushy
~~one~~ root sprouts.

small colony, probably
a clone, of saplings of
various ages, 1-5 or 6 years,
fasciated, but only toward
the end of each season's
growth, the fasciations
of various forms.

sapling 3 m. tall, freely
branched.

much branched small
tree 4 m. tall, bark light gray,
spines shiny dark brown,
buds reddish.

black paint-like patches
on bark, black markings
in wood.

1946 - Virginia - Illinois

March 17 - Bleeding Hollow 1½ mi. e. of Falls Church, Fairfax Co.

Goodyera pubescens

wooded slope, deciduous trees

Mar. 31 - Mulberry Grove, (4 mi. w. of Vandalia), Bond Co. Ill.
Open road cut, brushy ravine and edge of woods

50 Erythronium album
road cut

51 Dicentra
edge of woods

52
edge of woods

53 Staphylea trifoliata
edge of woods

54
wooded ravine

55 Claytonia
woods and wooded ravine, common

56 Dentaria
wooded ravine, occasional

57 Anemonella
wooded ravine, common

58 Phlox divaricata
woods, rare on flattish ground and in ravine

leaves glaucous-green, variegated with white

bulb very deeply buried, leaves variable in width blue-green with variable purple marking, buds shell-pink, flowers white.

leaves glaucous, corm pink, flowers white.

flowers white

bush, flowers white

flowers white

corm somewhat flattened, often decumbent at base, leaves somewhat fleshy, flowers white with pink veins.

rhizome moniliform with large segments, fls. white.

flowers quite pink

stoloniferous, flowers purple.

1946 - Illinois - Penna. - Va.

24259 Antennaria plantaginifolia — forming considerable patches
common on roadside banks

60 Cercis canadensis — shrub, calyx red, corolla pink.
occasional in woods

April 2, 1946 - 3 mi. e. of Washington, Pa.
G. Van Schaack

61 Corydalis flavula — flowers yellow
bleak ground, possibly burned sometimes badly under roadside trees, rare.

April 14 - Sleepy Hollow, 1 mi. s. of Falls Church, Fairfax Co.

62 Berberis thunbergii — straggling shrub 1 m. tall, fls. cream, bronzed without.
wooded bottom land, well established

1946 - ~~Virginia~~ Calif.

March 17 - ~~Alameda Hollow Park~~
~~mi. so. of Fallbrook, Fairfax Co.~~

2 April 20 - 2 mi. n. of Turlock, Stanislaus Co.
cultivated ground around
dwellings, watered, sandy loam

24263 Poa
common weed, sun or shade

64 Malva
common weed, sunny places

65 Acacia verticillata Willd.
cultivated

66 Sequoia sempervirens Endl.
cultivated, around drain

67 Hedera helix L.
escaped from cultivation,
established.

68 Vinca major
escaped from cultivation

69 Oxalis
escaped from cultivation, common.

70 Oxalis
escaped from cultivation, common

71 Oxalis cernua
escaped from cultivation,
common

72 Amsinckia
abundant in field

petals glabrous, pinkish,
emarginate, little if any
longer than calyx.
straggly pungent shrub
- 3 m. tall, fls. yellow.
~~small~~ young tree 6 m. tall
heavy woody vine, leaves
dimorphic.

vine, flowers blue-violet

corms thick, tuberous, multi-
plying by offsets. flowers
bright pink with purple
- lines toward center.
corms thick, tuberous, multi-
plying by offsets. flowers
- white. Probably a sport
from # 24269.
- stoloniferous, small plants
from bulbs, flowers bright
- butter yellow.
flowers orange.

1946 - Oahu

April 27 - Driving around Lanikai, Kailua, up over Nuuanu Pali, down Nuuanu Valley & around Honolulu - notes on distribution of introduced plants.

Sambucus sp. - rare in 1937. only noted in open air theater at University, now fairly common in cultivation around Honolulu.

Asystasia gangetica - noted in 1937 as established near University campus in a vacant lot - now one of the common weeds in Lanikai, Kailua and Honolulu, not up very high on Kailua - Honolulu road. Both purple and white forms noted, but purple much more common.

Paederia foetida - common along Nuuanu Pali road and even in Nuuanu Valley.

Eupatorium adenophorum - common along Nuuanu Pali road.

Catharanthus roseus - Established in Kailua.

Verbesina encelioides - in the thirties only seen near Mokuleia and Pearl Harbor - now one of the common weeds in Kailua and many parts of Honolulu.

Spathoglottis plicata is evident now everywhere where there is any amount of rain. Pali rd., Waikane, Manoa, etc. common.

Messerschmidia argentea common around Pearl Harbor, planted by Navy (Don Anderson).

1946 - Oahu

April 23 - Wailuku - Schofield Trail, Schofield side.

bushy forest, ridge top 2400 - 2500'

24273 Zanthoxylum

24274 gouldia

75 gouldia

76 gouldia terminalis (coriacea with sl. influence of typica)

Apr. 23 - same summit ridge

bushy windswept crest 2600 - 2800'

77 gouldia terminalis var. coriacea
lee side of

78 gouldia st-johnii (sl. contaminated by g. term. v. coriacea)
windward side of

79 gouldia st-johnii
windward side of

80 gouldia

with heavy oily fragrance when broken, tree 5 m. tall, flowers white, fragrant. (note small sepals) mass coll. 1 twig from a tree, flowering where possible. (with # 24275-6.)

small shrubby tree (buds fixed)

same (buds fixed)

small tree, leaves rather dull (buds fixed) flowers green

bush 1.5 m. tall, fls. green. (buds fixed)

bush 1.5 m. tall, fls. green fruit immature, fruiting calyx lobes fleshy, divergent (buds fixed).

mass coll. 1 twig from each of trees within reach of trail

1946 Oahu

Apr. 28 Waiahole - Schofield trail, Kahana side
wet brushy forest on steep slope 2000'-2400'

24281 Hedyotis centranthoides var. glomerata — subfruticescent herb with leathery leaves, buds purple (buds fixed)

32 Gouldia — mass coll. 1 twig from each tree within reach of trail

33 Hedyotis ~~glomerata~~ centranthoides var. glomerata — subfruticescent herb 1.5' m. tall, fls. purple without, green within.

Apr. 28 same, Waiahole Valley. 800'

34 Ficus planted along trail — small tree, cauliflorous, fruiting abundantly on lower part of trunk, more sparingly above and on larger limbs.

1946 – Marshall Is.

May 13 – Eniwetok Atoll

Parry I. + Eniwetok I. have been denuded almost completely.

Japtan I., Jieroru I., Igoin I. and Muri I. seem still fairly well covered with vegetation.

May 13 – Eniwetok atoll, Eniwetok I.
sand dunes facing inner beach
24+35 Ipomoea alba
seaward slope of dune.
very local.

~~36~~

36 Euphorbia atoto (?) chamissonis
lower slope of dune. rare
37 Ipomoea pes-caprae
seaward slope of dune,
very local.
38 Cassytha filiformis
parasitic on Ipomoea pes-caprae,
rare.

same – sand flats around buildings
39 Eleusine indica
common locally
40. Eragrostis amabilis
common locally

On Eniwetok Zea mays, Solanum lycopersicum and Ipomoea purpurea were seen in a garden. Tomato is said to do well.

prostrate, densely carpeting slope of dune, flowers white, closed in afternoon. leaves fleshy, veins conspicuously impressed above + below.
leaves fleshy, white beneath.

prostrate, leaves somewhat thick, sterile except for one old fruit.
leaflets parasite, stems green.

loose clumps, taller where sheltered.

depressed bunches, mostly dead.

24391 Scaevola frutescens (Mill) Kr.
common locally on entire island
(commonest shrub on island)

92 Cynodon dactylon
common locally.

93 Mesoaerschmidia argentea
occasional generally

94 Guettarda speciosa
rare (possibly planted)

95 Tournefortia argentea
rare, one male seen

96 Portulaca oleracea L.
common

97 Portulaca quadrifida
very common

98 Lepturus repens var. subulatus Forb.
common everywhere

99 Trianthemum procumbens
common

24300 Lepidium obtusum
occasional

01 Fimbristylis cymosa
common

rounded bush 1 m. tall,
coolly white within,
thickened parts green
without, fruits white, fleshy.

— forming dense mats, scapes
erect.

— shrub 1.5 m. tall, leaves
silvery-green, fleshy,
flowers white.

— shrub 2 m. tall, sterile.

prostate, forming
— thin close mats on sand.

prostate, fleshy,
— pink.

— prostate, dense, fleshy,
purplish, leaves thick
but compressed, arranged
in flattened masses,
flowers yellow, about
15-20 mm. across,
style branches 5, stamens
— about 15. root thickened.

— forming bunches but
with runners forming
mats.

— prostrate, stems several
m. long, branched, forming
mats; flowers yellow!
leaves fleshy.

— loose small tufts

tufts, leaves rather stiff.

May 14 – Igurin Islet,
Eniwetok atoll
flat sand mixed with
coral fragments, slight
swale in center but this
has been destroyed by
naval installation

(no makatea noticed)
(no Pandanus seen)
(one Cerbera seen, not collected.
sterile grass seen, not coll.)

24302 Morinda citrifolia
not common, but several
small patches noticed
03 Cordia subcordata
only one small patch seen
in rather low brush toward
east end of island
04 Pisonia grandis
common in wooded central
part of island, this plant
on inner beach.

05 Ipomoea alba
occasional on inner margin
of woods

06 Boerhavia diffusa
occasional patches in open shaded
sandy places,

vegetation is basically
a tall brush of Scaevola
with Guettarda quite
common, and Pisonia
common in main part
of island but dropping
out toward the ends.
Messerschmidia is
common on the outer
and inner edge, but
scarce inland. Tuiana
only on west end, not comm.
Coconuts planted, especially
at center
– small tree 4 m. tall,
leaves somewhat glossy
above, flowers white
– shrubs 1–2 m. tall
completely sterile.

wind-beaten tree 5 m. tall,
staminate, flowers
fragrant, perianth green
but with revolute edge
whitish.
– vines mostly dried up at
this season. Leaves of old
plant fleshy. (the better
leafy branch from a
different plant, just starting
– this seasons growth.
very prostrate, forming large
thin mats. stems + petioles red,
leaves whitish beneath, fls. pink.

24307 Portulaca lutea
several small patches near inner beach, in rather open places

08 Pisonia grandis
common on main part of island.

09 Canavalia cathartica Thouars
occasional on inner side.

10 Suriana maritima
occasional, but only in open places on extreme west end of islet

11 Triumfetta procumbens
common but very locally, mostly on open sand.

12 Guettarda speciosa
very common throughout vegetation

13 Cassytha filiformis
occasional, (this one parasitic on Guettarda)

14 Scaevola frutescens (Mill.) Kr.
the dominant plant in the vegetation, forming in most places a dense bush.

15 Messerschmidia argentea
common, especially along outer edges of vegetation

stems ascending, gray-brown, thick, whole plant fleshy. (no fls. seen)

— shrub 2 m. tall, pistillate, very few seen with fruit.

vine climbing over trees, fruiting ones dead, living ones sterile.

— bush 1 m. tall, flowers butter-yellow. (only this one bush seen flowering, others all past fruiting).

prostrate, leaves fleshy, flowers yellow.

shrub 1.5 m. tall (others several times as tall), flowers white, very fragrant, fruits apparently not quite mature.

— leafless parasite, stems yellow-green.

— shrub 5 m. tall (commonly this tall except toward ends of islet) flowers white (even on thick parts) with purple markings in sinuses.

— tree 5 m. tall, (others even taller), leaves silvery green, fleshy, flowers white, fragrant

1946 – Marshall Is.

24316 Cocos nucifera L.
commonly planted almost throughout islet.

(a single tree of Mangifera indica and one of Artocarpus altilis reported on good authority, not seen by me.

May 15 – Japtan Islet, Eniwetok Atoll
flat coral sand toward inner beach, becoming more and more rocky toward outer beach and along passage.
Vegetation basically a brushy growth of Scaevola, Pisonia, Guettarda, Cerbera, with some Morinda citrifolia, scattered Pandanus, the inner portion planted to cocos.
The Pisonia is mostly rather small, but with some large trees, these almost leafless – possibly because of the dry season.

tree 10 m. tall, leaves several m. long; panicles enclosed in a woody spathe before anthesis, at anthesis both ♂ sexes of flowers and panicles ivory-white, resembling carved ivory; specimens represent only small fragments of panicle & leaf.
The number of husks on ground indicate that copra was produced here before the war.

Pisonia is in flower and so abundantly so that the air is perfumed.
This vegetation is very disturbed, both by bomb craters, bulldozer activity and with a maze of roads.
The forest becomes much lower and more scrubby toward the outer beach, as the ground gets rockier and rockier. Nowhere is there the dense solid growth observed on Tguirin.
The Pandanus is not especially variable, except in leaf length.

24317 Pandanus tectorius Park.
occasional, especially toward inner beach.

18 Guettarda speciosa L.
common throughout island

19 Ximenia americana L
very rare, 2 plants seen on rubble toward outer beach

20 Eleusine indica
around village

21 Fleurya ruderalis Gaud.
occasional

22 Triumfetta procumbens
common

23 Portulaca quadrifida L.
openings, common

24 Cenchrus echinatus
rare, ~~bottom of excavation~~ around dwellings

25 Lepturus repens (Forst.)
common in openings, this clump on lagoon beach.

26 Portulaca lutea Sol.
common in open places

27 Setaria verticillata
rare, one clump seen in bottom of ~~depression~~ excavation

tree 8 m. tall, sparsely branched, fruit green distally, ~~yellow~~ fleshy part yellow, sweet, with peculiar ether-like flavor, not at all irritating, – eaten by natives.

shrub 2 m. tall, fruit green, fls. white.

rigid bush with weak spines, leaves yellow-green, – fls. yellow, fruit immature small tufts

stems red, fleshy, leaves glossy, low rounded – bushy herb.

prostrate, root system very extensive, as long as branches, sterile

prostrate, roots enlarged, – plant fleshy, fls. yellow, dense clumps.

dense clump of erect culms with ~~st~~ runners – spreading from sides of clumps.

spreading, stems fleshy, leaves fleshy, flowers yellow 1.5 cm. across, stamens – many (over 25).

dense clump.

24328 ~~Tournefortia~~ Heliotropium inundatum (L.)
small patch in open ground

29 ~~[illegible]~~ Ochrosia oppositifolia
common in bushy vegetation on rocky ground

30 Cassytha filiformis
parasitic on Guettarda, the host completely covered and almost dead.

31 Terminalia ~~catappa~~ samoensis Rech.
rare, 2 small trees in rocky ground along passage.

32 Pisonia grandis
very common, codominant to dominant in vegetation.

33 Tacca leontopetaloides
rare, one clump seen in rocky soil in opening.

34 Boerhavia diffusa
occasional

35 Morinda citrifolia
common

36 Scaevola frutescens
abundant, co-dominant in vegetation

37 Pisonia grandis
very common, co-dominant in vegetation.

38 Cordia subcordata
rare, one tree seen on inner beach

small bunches.

small tree 5.5 m. tall, buds white, fruits on ground beneath.

- leafless parasite, stems yellowish green, flowers white.

tree 4 m. tall, densely branched, fruit immature.

low trees, some getting ~~very~~ large.

leaves just unfolding, tubers about ~~2~~ 5-8 cm. below surface of soil.

- prostrate, stems red, small tree 3-4 m. tall, leaves glossy, flowers white, fruit translucent, when decomposing with a powerful strong odor.
- shrub 1.5 m. tall (others much taller), flowers and fruit white
- shrub 3 m. tall, flowers green with whitish reflexed margins
- fruit immature.
- tree 10 m. tall, flowers delicate, brilliant orange, fruit green.

24339 Messerschmidia argentea — tree 5 m. tall, flowers white, fruit green, ~~flesh~~ fleshy.
common, especially along beaches — small bunches

40 Digitaria
fairly common in open places and under coconuts.

41 ~~Tribuleamus~~ Thuarea involuta — very prostrate, forming large thin mats; fruiting spikes erect.
occasional in sandy places toward inner beach.

42 Ipomoea alba — extensive vine; leaves not fleshy, flowers white.
abundant, climbing over everything

43 Fimbristylis cymosa — tufts
common in open sandy places

44 Eragrostis amabilis — spreading, prostrate tufts.
common, especially in open sandy places.

May 16 - Aomon Islet, Eniwetok Atoll

flat, very broad from lagoon to outer beach. mostly sandy flats, changing to broken coral rock as outer beach is approached.

Practically entire islet planted to coconuts. The inner part clear beneath, with a grass covering of mixed Lepturus repens and Eragrostis amabilis. Nearer the outer beach a brush of Scaevola and Pisonia occupies the space beneath the trees. This seems to be occasionally cleared

out, and in any given place seems to be of uniform age. Here and there it is mixed with Morinda and Guettarda with occasional Messerschmidia. The latter forms a conspicuous fringe around the outer and channel beaches. Just inside this Cordia is rather common.

Two Boerhavias are common, one more so toward the outer, the other toward the inner beach, but both present both places, not noticeably intergrading.

Coconut "waeni" and Pandanus "Bof" not collected. Informants chief Joseph and chief Brown Smith.

24345 Fimbristylis cymosa
local in grassy open land under coconuts near inner beach.

46
on stone walls of well in center of island, brackish water.

47 Eragrostis amabilis
common in sandy disturbed places, along trails and around village.

48 Achyranthes aspera
one small patch near center of island.

49 Ipomoea alba
common toward ~~[illegible]~~ ~~[illegible]~~ outer side of island.

50 Morinda citrifolia
common locally, especially toward outer beach

51 Cordia subcordata
common along a strip just in from the outer beach

52 Messerschmidia argentea
abundant along outer and channel beaches, occasional inland.

53 Lepturus repens
abundant throughout the island, especially in open places, where it is the dominant plant.

54 Thuarea involuta
occasional on rocky soil toward ~~[illegible]~~ outer beach

tufts, spikes already shattered.
"berejisman"

~ greenish slimy ~~[illegible]~~ coat on stones.

spreading loose clumps.
"ujos" (perhaps ~~[illegible]~~ simply meaning "grass")

erect herbs, 1 m. tall.
"kalekkek"

vine climbing over bushes. "bel"

bush 3 m. tall, flowers white, ripe fruit white, looking like a potato "nen"

sterile shrubs 2-3 m. tall. "kono"

tree 7 m. tall, flowers white, leaves fleshy, silvery green. "kirin".

tufts, spreading by runners. "ujos aitok".

very prostrate, forming thin mats; sterile.
"ujos maroro".

#24355 Digitaria
rare, on rocky ground near outer beach

56 Boerhavia diffusa
common on rocky ground near outer beach.

57 Pisonia grandis
codominant with Scaevola in basic vegetation of island.

58 Portulaca lutea
common, especially in open places.

59 Lida fallax
common in openings, especially toward outer beach.

60
disease on Lida fallax
Not determinable.

61 Scaevola frutescens
co-dominant with Pisonia grandis in basic vegetation of island

prostrate rooting at nodes, culms spreading & ascending
— "ujoz kulkuli"
prostrate, stems red, leaves purple beneath, thin, flowers pink. (found with # and not especially intergrading with it) "matok"
(not seen fruiting) (not
— seen affected by albugo)
shrub 3-4 m. tall, stems brittle (others seen much larger)
— "kañae" (pronounced kangae)
stems reclining to ascending, whole plant fleshy, flowers not seen
— (11:30 a.m.). "kiran".
shrubs 1-1.5 m. tall, flowers orange with red patches just above claws of petals, making a red-centered flower. "kio"
— (attached by powdery mildew #24360)
plants more or less ~~[illegible]~~ unhealthy looking, practically sterile, when
— heavily infected.
bush 1 m. tall (others to 3 m. or more), flowers white, sinuses tending to be purple marked "mai kinat"

2 24362 Boerhavia diffusa
common, especially inland (but growing with #24356 and not especially intergrading with it)

63 Albugo ~~boerhaviae~~
fairly common on Boerhavia diffusa, but only on the fleshy-leafed form of it (var. tetrandra?)

64 Guettarda speciosa
common throughout island.

65 Cassytha filiformis
parasitic especially on grass (Leptochloa, etc.) but on other plants also, very abundant.

66 Triumfetta procumbens
common throughout island especially in open places.

May 17 - Eniwetok I.
Eniwetok atoll
sandy flats around buildings.

67 Euphorbia hirta
rare, one plant seen

68 Vernonia cinerea
local

69 Digitaria
local

prostrate, stems green to reddish, leaves subfleshy, white beneath, flowers pink (larger than in #24356) "matok aitok"
(commonly attacked by albugo #24363) producing a conspicuous alteration in growth habit)

shrub 2 m. tall, flowers white, ripe fruit white, fleshy, subglobose. "wut"

forming great patches on grass, stems yellow-green; flowers white, fruit translucent white, pericarp surrounding but not touching ripened ovary. "kenen"

main stems prostrate, branches erect (in shade, in full sun entirely prostrate), flowers yellow.

tips arching

herb up to 1 m. tall, flowers purple.

124370 Mirabilis jalapa
one plant seen

71 Lida fallax
occasional near west end of islet.

72 Amaranthus viridis
one small patch seen

May 16 – Hosaka collected Pemphis acidula and Suriana maritima on Piinai Islet, saying they were abundant.

May 17 – R. Oakley collected a specimen of Artocarpus altilis on Japtan Islet. It represented the one tree. (records of natives visiting Japtan to collect breadfruit supply to Pandanus, which the naval people mistook for breadfruit. Oakley searched for the named mango but was unable to locate it.

bushy herb, flowers crimson, closed at 11:20 a.m.
– plant prostrate (others seen more or less upright), flowers orange, with reddish spots on petals just above claw.
– prostrate, stems purple striate, spikes purplish.

May 18 - Engebi Islet,
Eniwetok atoll

This islet was almost completely denuded. At the outer end a few tattered remnants of forest remain, mostly Pisonia and Messerschmidia, with Scaevola between.

In other parts there is grass and flats on which the bushy vegetation is beginning to come back. This process is interesting in that it is almost unaccompanied by succession. Of course, a few weeds gain a foothold in many places before the Messerschmidia and Scaevola, and in the grassy parts a definite vegetation develops. The grass is mainly Leptochloa and Eragrostis. It seems to retard rather than further the development of the bushy type, which in the more gravelly or rocky types of soil comes back directly.

I would judge that the Pisonia is a later member of the vegetation, coming in in the shelter of the Scaevola

and Messerschmidia.

Remnants of cultivation are scattered here and there over the island, especially in the more sandy places and around buildings. Tomatoes form luxuriant vines and excellent fruits, though very few fruits were setting when we were there.

Cucurbits of several kinds seemed to do fairly well, though they were more or less chlorotic and set few fruits. Ricinus was flourishing as a dooryard plant. Mr. MacMillan mentioned a gourd (prob. Lagenaria siceraria) which I didnt see. Most surprising of all was a small patch of broom corn.

The coconuts were almost all gone.

How the single bush of Pluchea odorata got there is hard to guess.

24373 Digitaria
common locally, especially around buildings

74 Solanum lycopersicon
small patches persisting from cultivation

75 Citrullus vulgaris
small patches, persisting from cultivation

76 Cucurbita maxima
growing over bomb-shelter

77 Ricinus communis
planted around building

78 Cenchrus echinatus
very abundant over all the islands

79 Cynodon dactylon
common locally

80 Cucurbita maxima?
one patch seen, persisting from cultivation

81 Morinda citrifolia
rare, 2 or 3 bushes seen

82 Vernonia cinerea
common in one place

83 Sorghum vulgare var. technicum
persisting from cultivation

84 Eleusine indica
common everywhere

erose bunches, tending to cover the ground.

vines luxuriant but flowering sparingly, setting very few fruits.
— plants prostrate, flowers yellow; fruits globose, weakly striped; immature (plants chlorotic, setting few fruits).
— plant prostrate, leaves with gray patches, flowers yellow, fruit very immature.
— shrub 2 m. tall, staminate flowers yellowish, pistillate red.
— spreading tufts.

forming dense turf

prostrate, extensively creeping, flowers yellow, leaves green, without gray spots.
— bush 1.5 m. tall, flowers white, leaves glossy.
— erect herb, up to 0.8 m. Tall, heads purple.
erect herb 2 m. tall.

plants vary in size with protection of location —

24385 Euphorbia chamissonis Boiss

86 Fimbristylis cymosa
common near inner beach

87 Eragrostis amabilis
common everywhere

88 Brassica
in open field, only one seen, probably persisting in cultivation

89 Sida fallax
common locally

90 Amaranthus deflexus
small colony near windward side near buildings

91 Wedelia biflora DC
local on sandy or rocky flats.

92 Setaria verticillata
common, this plant from slope of rubble pile

93 Sida fallax
common, especially toward ~~windward side~~ outer beach

94 Boerhavia diffusa
common locally on ~~one~~ outer beach

leaves pale beneath, flowers sticky. — tufts

prostrate spreading tufts. — leaves anisopate, petioles white.

herb up to 0.8 m. tall, stems reddish.

prostrate with ascending branches, forming extensive low tangles. rays yellow. leaves more or less fleshy.

shrub 0.7 m. tall, flowers orange with reddish spots above claws of petals. — prostrate from thick root, ~~the~~ stems red, leaves somewhat fleshy, pale to reddish beneath, flowers pink.

24395 Lepturus repens
common all over islands
96 Messerschmidia argentea
common, especially toward windward side, codominant.
97 ~~Guettarda~~ Scaevola frutescens
~~beach~~ common, especially toward outer beach
98 Guettarda speciosa
occasional
99 Fleurya ruderalis Gaud.
local ~~on~~ ~~on~~ on roadsides
24400 Portulaca ~~quadrifida~~ oleracea
common everywhere in open ground.
01 Tribuloides procumbens
common
02 Pisonia grandis
common toward ~~inner~~ outer beach

03 Tribulus cistoides L.
one small patch seen in open flat.

04 Ipomoea pes-caprae (L.)
patch near east passage

05 Pluchea odorata
one bush seen, ~~on~~ ~~in~~ somewhat sheltered by embankment.

bunches with runners spreading from them
— small tree 5 m. tall, flowers white, leaves silvery green, fleshy.
— rounded bush, flowers and fruits white.

bush 1.5 m. tall, flowers white
— stems red, fleshy.

prostrate, fleshy, flowers yellow, 1 cm. across, petals apiculate.
— prostrate, extensive fl. orange-yellow.
— small tree 4 m. tall (others much larger), leaves on ~~windward~~ exposed side of tree fleshy, glossy, on other side thin & dull.
— prostrate, extensively creeping, flowers yellow, one at or near end of each stem.
— prostrate, extensively creeping, leaves fleshy, scarcely notched, flowers purple, open during forenoon.
— low rounded bush, 1 m. high, heads pinkish.

1946 - Marshall Is.

r4426 | Ipomoea alba
common

07 Cleome inflata
common here and there
about buildings

08 Portulaca oleracea
common everywhere

09 Cucumis melo
a few plants persisting
from cultivation

trailing on ground,
lactiferous, leaves
scarcely fleshy, vein
impressed above.

prostrate, often forming
great mound-like
masses up to 1 m. or
more across, fleshy,
flowers small (5-6 mm.)
stamens 10 or less.
plants prostrate,
flowers yellow,
fruit about half grown.

May 23, 1944 – Moen I., saddle ~~at~~ Mt. Tonaachau and main part of island
weedy disturbed ground

24410 Chrysopogon aciculatus

11 Paspalum conjugatum

12 Cenchrus

13 strike leaf
rust on Cenchrus (24412)

May 23, 1944 – Moen I. old village of Mechetin, w side of bay of Bou.
cultivated and weedy
marshy land at base of hill
on flat behind ~~a~~ ~~[illegible]~~
shore

14 Morinda citrifolia L.
above marsh level

15 Columella trifolia
~~[illegible]~~ at and above marsh level

16 Physalis
just above marsh level.
in deep grassy vegetation

17 Ipomoea reptans
growing in ponds in standing water.

prostrate, clinging tightly to
– ground, scapes erect.
stems prostrate rooting
at nodes, scapes erect,
– spikes divergent.
culms spreading from
root crown, spikes
– cylindrical
purplish brown spots
on leaves.

shrub 7 m. tall, flowers
– white.
vine climbing on other
vegetation, panicles
– flat-topped, fls. green.
slender herb, tangled
with other plants,
– flowers pale yellow with purple centre.
stems inflated; plant
~~[illegible]~~ said to have
been introduced by
Japanese, young tips
eaten.

1946 Truk Is. (Caroline)

24418 Ipomoea
common

2 May 23, 1946 - Moen I. new location of Mechetin, on S. n. e. coast in pen. (informant about mile) c
narrow mangrove swamps and village grounds back of it.

19 Excoecaria agallocha,
common

20 Rhizophora mucronata
dominant in vegetation

21 Davallia solida
common on tree trunks at edge of and back of mangroves

22 Hedyotis biflora
on base of tree trunks at edge of mangroves

~~Oakley - same loc. + date~~
~~+ scab on Citrus aurantiifolia~~

---

23 Vernonia cinerea (L.) less.
weedy ground around village

May 23, 1946 - Moen I.
saddle bet. island and peninsula called Iabuk.
abandoned cultivated ground, used as gardens by the Japanese

24 Hygrophila salicifolia Pin.

Moen I.

vine climbing in trees, flower bright purple.

lactiferous leaves thick, small tree, sap said to be ~~[illegible]~~ cause skin irritation "ousiis"

"chia" small tree with arching prop roots, flowers cream whitish; leaves with distinct mucro, leathery. "katu"

prostrate to ascending, leaves fleshy, pale beneath, corolla pale lavender, tube swollen, throat constricted, lobes erect. "nisarfönu"
fls. purple. "ennentuko"

Oakley - same loc. + date
rust on sugar cane (?)
+ scab on Citrus aurantiifolia.

tangled herb, strongly aromatic, flowers violet. "lekenek" or "nekenek"

1946 Truk Is. (Caroline Is.)

24425 Wedelia biflora
common in openings all over island.

? 26 Passiflora foetida L. var. hispida (DC) Killip
common among weeds

27 Cassia

28 Vigna

May 23, 1946, Moen I. slopes of Mt. Tonaachau
the slopes of this mountain, and apparently of others in the island group were apparently once well wooded. Native cultivation has broken down this vegetation completely. Breadfruit and Coconuts have been planted to the tops of the mountains. Patches of woods (second growth) and thickets persist,

prostrate with ascending branches, rays & disk yellow.
– vine, flower white with basal part of corona lobes purple, fruit orange, sweet and of fair flavor, herbage with unpleasant odor but not strongly so.
– erect herb 1.5–2 m. tall, flowers yellow. Said to have been used as a substitute for tea by the Japanese during the war.
– vine with erect peduncles; flowers purple with a white straight keel. Eaten by natives and Japanese.

---

especially on steep places. The Japanese cut down many of the coconuts and breadfruit and planted sweet potatoes, which are still abundant. Many open places are covered by Miscanthus japonicus. The main hill trees and shrubs are Glochidion, Premna, Acalypha, #24439, etc. Wedelia is common. Ipomoea sp. #24418 covers the hills. Manihot is also commonly cultivated.

1946 Truk Is. (Carolines)

24429 Premna stenophylla R. Br.
occasional in thickets

29

30 Glochidion
most common tree on slopes and ridges

31
rare on slopes & ridges

32 Acalypha
very common on slopes in thickets

33 Stachytarpheta dichotoma
in open grassy places

34 Lelia
weed in cultivated field

35 Cyperus
weed in cultivated field

36 Derris
weed in abandoned cultivated-field

37 Macaranga
~~[illegible]~~ in thickets

38 Glochidion
in thickets, common

39 Commersonia bartramia (L.) Merr.
occasional on slopes

moen.

shrub 2-3 m. tall, rather unpleasantly aromatic; flowers greenish white; fruit green, ripe ones black.

— small tree, wood pink, dense; flowers yellow; fruit green, seeds red. (wood sample)

— shrub 3 m. tall, flowers pinks

— shrub 2 m. tall

flowers deep blue-purple

dense erect bunch

small dense tufts

sterile vine, leaves ~~[illegible]~~, glaucous beneath.

— shrub 2 m. tall, fls. greenish

shrub 3 m. tall, flowers yellowish.

— shrubby tree 5 m. tall, fls. white.

1946 Truk Is. (Carolines)

May 24, 1946 – ~~Tol~~ Tol I.,
Mt. Uniriboet,
montane rain forest covering
top third of mountain

24470 Pteris
common in shade

41 Nephrolepis
common in openings

42 Glochidion
occasional on slopes

43 Asplenium
base of tree trunks

44 Piper

45 Cyperus
along trail

46 Psychotria
common

47 Selaginella wallichii
common on wet rocks

48 Polypodium
very local on top of mountain

49 Eugenia
rare

50 ~~Intsia bijuga~~ Cynometra
one of the commoner trees in

51 Piper

52 Acalypha
common

53 Acalypha
common

frond not plane, young
ones especially with
– pinnae raised.
small tree 15 m. tall,
fls. yellow.

vine, climbing in lower
branches of tree, aromatic
when broken.
tufts

shrub 3 m. tall, flowers
– white.
erect.

small tree

tree 20 m. tall, 5' dm. thick

900' vine, climbing in tree,
– leaves pale beneath
800' shrub 2 m. tall,
– staminate spikes weak.
shrub 2 m. tall, pistillate
spikes erect, styles red.

24454

55 Macaranga
common on top of mt.

56 Psychotria
common on top of mt.

57
occasional on top of mt.

58 Psychotria.
prob. same as #24456, growing with it.

59 Cordyline terminalis
scattered along trail

60 Psychotria
rare, one plant seen on top of mt.

61
common, terrestrial

62 Tingida
occasional top of mt.

63
common on top of mt., some germinating everywhere

64 Pipturus
occasional on slopes

65 Geocardia herbacea
common along trail on slopes

66 Psychotria
common on slopes

67 Pipturus
occasional on slopes

shrub 2 m. tall
fruit immature
tree 10 m. tall

shrub 3 m. tall

tree 8 m. tall, spreading,
- flowers white.
shrub 1.5 m. tall,
fruit yellow.

relatively small
plants only seen, buds
white. "tin"
- shrub 2 m. tall, flowers
- white, stamens exserted.
stems succulent, fleshy;
- leaves thin, flowers and yellow
leaves dark green, paler
- below
large tree, aromatic, seed
grated, mixed with coconut oil to
apply to hair.
shrub 2 m. tall.

prostrate, forming mats,
scapes erect, flower white,
- fruit red, fleshy.
shrub 1.5 m. tall, fruits
- immature
shrub 3 m. tall, spreading
pendent stigmas white
leaves clear green beneath

24469 Panicum
lower east notes

69 Randia carolinensis Vat.
very common in entire [illegible]

70 Randia carolinensis Vat
very common in entire [illegible]

24470 Typhododo

some - but [illegible] of mountain [illegible] mostly [illegible] and breadfruit, with [illegible] and plots of [illegible]

71 Psychotria
[illegible] in [illegible] with

72 Cinnamon
[illegible] in [illegible] with

same - [illegible] near bay, Faron
B. lifrit [illegible] are [illegible] small streams and [illegible] growth [illegible] small petals [illegible]

73 Caladium bicolor
~~[illegible]~~ established [illegible] in wet places

74 Citrus aurantifolia
commonly cultivated

75 Paspalum vaginatum
abundant, dominant in marshes along bay.

[illegible] in [illegible] with

tree 10 m. tall, flowers white.

B. climb of [illegible] 2-3 m. tall fruits not completely [illegible]

about 3 m. tall, [illegible] "nen" (from Nen Kaercher)
[illegible] root brown yellow within, aromatic; bracts [illegible], flower a cream without, purple within [illegible])

Coelococcus seen here quite commonly.

leaves white veins and margins extend in green. ~~[illegible]~~ petioles purple.
tree 5 m. tall, leaves dark green, fruit turning yellow.

1946 [illegible]

24474a [illegible]

——— Enhalus acoroides

May 25 - From [illegible]
I saw many [illegible] that have been [illegible] destroyed. When [illegible] Gordon's [illegible] oil [illegible] the mangroves caught fire and burned them.

24476 Sonneratia alba 1 sm.
[illegible]

77 Bruguiera
common

79 Bruguiera
common

79 Hedyotis biflora
edge of stone [illegible] in [illegible]

1 [illegible] - Udot

[illegible]

The 5 m. tall [illegible] to [illegible] - those [illegible] ready to [illegible] 2 m tall, other much taller). [illegible] petals [illegible] to close, many [illegible] rounded, [illegible]
The 5 m. tall [illegible] pneumatophores [illegible] leaves thick, [illegible] smooth, [illegible] [illegible]

[illegible]

Udot I. [illegible]

71 Cyrtosperma merkusii (Hassk.) Schott
cultivated in [illegible], det D.H.Nicolson 6/1998
[illegible]

82 Polygonum
[illegible]

May 25 - Manitu village, Udot I.
Cultivated lowlands back of mangrove swamp and beach. Flats with marshes and tidal channels separated by hard, bare basalt outcrops which run right down to the beach.

Udot

[illegible]

[illegible] exact pattern [illegible] up to 2 m. [illegible] petals [illegible] in pairs, [illegible] about 1 m. tall [illegible] light green, not not [illegible]. [illegible] of [illegible] often at about 2-3 years. [illegible] flowering time [illegible] leaves from different plants do show variation in [illegible] "peela" [illegible] stems [illegible] extensive, flowers white.

Coconuts + breadfruits are principal crops - also Manihot and bananas.
Acteria very common in marshes
Barringtonia racemosa along tidal channels.

 1946 Truk Is. (Carolines)

24483 Derris
~~a~~ at top of beach, locally common.
~~84 Thespesia populnea~~

84 Thespesia populnea
occasional
85 Bambusa vulgaris Schrad. ex Wendl.
rare, planted.

86 Barringtonia
abundant along small streamlets or tidal channels.

87 Canavalia ensiformis (L.) DC

88 Polyscias trifoliolata
ornamental in yard
89 Polyscias
ornamental in yard
90 Acalypha
very abundant in marshes also invading cult. land.

Udot).

sterile vine growing on ground and on base of coconut trees.
"ulelipot", not used as fish poison.
- tree 6 m. tall, wood used. "pōno"
~~[illegible]~~
- clump of small culms 2 m. tall, sheaths from 4th & 5th nodes, sheaths pendent from the middle part of attachment. Other culms seen from same clump, but in use, that must have been 8 or 10 m. tall, nodes about ~~2 dm~~ 2.5 dm. apart. Said to have been brought in by Japanese.
- shrubs 2-3 m. tall, inflorescence pendent, ~~stamens~~ petals white or greenish white, stamens pink, style deep pink. "sol" pronounced "saur"
- erect but becoming vine-like, pods green. Introduced by Japanese.
- very erect; leaves variegated. shrub 2.5 m. tall. sterile
- dense shrub 1 m. tall. sterile.

herb 1-1.5 m. tall, from dense root crowns.

71 1946 - 7 nilk) 1. (Carolines)

24449 Stachytarpheta
cultivated in gardens
as ornamental.

92 Lantana camara f. aculeata
cult. in garden as ornamental.

93 Euphorbia heterophylla
cult. in garden as ornamental

94 Hernandia ovigera
edge of beach

95 Derris
common everywhere in
disturbed ground.

May 25 - Udot I., old mission
garden ~~[illegible]~~ in saddle bet.
Monuä (Moluä) and Manitu
villages.
semi-cultivated ground.

96 Capsicum frutescens

97 Morinda citrifolia L.

98 Citrus aurantium

shrub 1 m. tall, trimmed
into a hedge, fls. deep
blue-violet.
shrub 2.5 m. tall, fls.
~~[illegible]~~ yellow, turning pink.
shrub 1 m. tall, patches on
bracts varying from
salmon to white. said
to have been red to start
but getting gradually
white. Perhaps a deficiency.
tree 6 m. tall, leaves
leathery, fls. greenish white;
fruit fleshy, white. "aguan"
vine creeping on ground,
leaves glaucous beneath.
sterile. "up" or "ub" roots
pounded and used to poison
fish. used in quantities of
a large double handful.

Many cultivated species said
to have been brought from Ponape
by missionaries.

shrub 1 m. tall; fls.
greenish.
bush 3 m. tall; flowers
white; fruit eaten when
ripe and soft. "napui"
Tree 7 m. tall, apparently
free from scab that attacks
C. aurantifolia not far away.
oranges sour.

1946 Truk Is. (Caroline)

24499 Annona muricata L.

May 25 Udot I., Monuä (Moluä) village
semi-cultivated land in village.

24500 Citrus aurantifolia

01 Pemphis acidula
top of beach

02 Xanthosoma sagittifolium (Hum.) Schott
on Citrus aurantifolia #24500

May 27 - Tefan I., saddle bet. Mt. Chukuson + Mt. Chukuchap, bet. Mesa Village and Lanuk (above Toudjuén Village)
open grassy slopes with Paspalum conjugatum, P. orbiculare, small ~~too~~ thickets of Premna, Glochidion, Acalypha, etc., with Coix and Artocarpus

03 Hibiscus tiliaceus
patches on slopes

04 Acalypha
common in thickets"

Udot I. - Tefan I.

tree 6 m. tall, leaves glossy.

tree 4 m. tall, badly infested with scale.
- shrub ~~[illegible]~~ 2 m. tall,
- flowers white.
heavy infestation.

planted abundantly, but numbers of these cut by Japanese who planted patches of sweet potatoes and manihot. Many of the palms had the tops broken off or shattered, said to have been cut by the Japanese to get the cabbage. Paspalum provides a good quick cover to cut down erosion. It has almost taken over the sweet potato patches.
- small tree 5 m. tall; leaves dark green above, glaucous beneath; flowers clear pale yellow with maroon center. "sirifö"
- shrub 2 - 3 m. tall "manou"

1946 Truk Is. (Carolines)

24505 Premna obtusifolia R. Br.
common in thickets.

06 Eugenia [illegible]
~~disease~~ moist open slopes

07 Polygala
common on open slopes along trail

May 27 – Tefan I., Mt. Chuhsuchaap
small patch of native forest on steep side of ridge crest. Calophyllum inophyllum, Ficus

08
common

09 Ficus
several trees in small patch

10 Canavalia cathartica Thouars
common vine in forest

11 Glochidion
occasional to common on ridge and slopes, coming in after clearing

12 Macaranga
common, coming in after clearing

13 Derris
common

14 Cynometra
one large tree seen

Tefan

shrub ½ m. tall.
"nior unuleau"
— disease on Ipomoea batatas.

flowers white, roots with wintergreen odor.

sp., Cynometra
laced with Canavalia
~~and~~ Mucuna, & Columella
— vines.
vine climbing in trees; flowers green "achearchen"
— large tree, sterile. "au"

vines tangled in trees.
- undoubtedly more than one plant represented in collection. flowers rose-pink (only one seen eaten by a large [illegible] in press) "chochon"
— small tree; flowers yellow "afor"

small tree, flowers greenish "unp"
— vine, climbing in trees, leaves glaucous beneath, dark green above; sterile. "unp"

tree 10 m. tall, leaves glossy above. (Omnö)

2 May 27 – Mesa Village, Tefan I.
marshes back of beach,
slightly higher ground
back of this, and slopes
above.

74515 Blechnum orientale L.
cavity in rock of road cut

16 Ipomoea batatas L.
along road

17 Cyperus javanicus
just above edge of marsh

18 Phyllanthus amarus Schum. & Th.
det. F. L. Wilder, 1955
common weed

19 Lida rhombifolia L.
common weed

20 Urena lobata L.

21 Luffa cylindrica
common weed

22 Coelorceus
occasional in marshes

"mburuq"
(wood specimen)

miscanthus japonicus
"asat"

shrub, very short, erect,
75 m. young fronds rose-orange.
vine creeping on ground.
75 m. flowers lavender, stems
& petioles maroon.
small dense tuft. leaves
slightly glaucous "noiren"
erect "negamaui" "nekamaui"

erect, 0.8 m. tall, flowers
yellow. "sieunen"
flowers pink "noknok" (nogonok)
vine, climbing over buildings,
bushes, etc. flowers
yellow. "morenof"
tree 12 m. tall, leaves
ascending, flowers
inflorescences ascending,
trunk hard toward outside,
firm but pithy within,
covered with small
incipient roots about
1 cm. long, above with
stubs of old inflorescences,
leaves with sheath
closed below (about 3 dm.?)
old infls. with mature
fruit below leaves
leaf scars inconspicuous.

1944 Truk Is. (Caroline)

2 May 28 slopes of Mt. [illegible]

cultivated slope
24523 Alocasia macrorhiza
small patch, cultivated
on slightly moist ground.
but not in water.

3

upper steep wooded ridges
and slopes, decadent moist
forest, with some large
trees.

24 Acalypha
thickets near lower edge
of forest

25 Horsfa
near top of mountain on open
ridge.

26

near top of mt. on open ridge.

27 Pouzin pedunculata
common near top of mountain

erect stem 5 dm. tall,
leaves up to 2 m., peduncles
axillary, up to a dozen in
various stages on one
plant, each enclosed in
2 linear bracts, spathe
brownish purple with green
base, ~~stamens part~~
upper part of spathe yellow,
middle part white,
tessellate, lower part
with greenish ovaries
and white stigmas. "kä"

bush 1.5 m. tall (possibly
extreme form of # 24504),
leaves fleshy
vine tangled with other
vines: flowers white
– corona ~~with prominent lobes~~
vine with yellow flowers.

~~corona~~ fleshy herb
"atatagui" (k)

1946 Truk Is. (Carolines)

1 24578 Centotheca ~~latifolia~~
common
29 Gleichidion
common
30 Gleichidion
common
31 Pothos
common near top of mt
32 Davallia
shaded slope near top of mountain
33 Pittosporum
rare, near top of mt.

34 Abrus precatorius
valley slope

35 Croton
occasional near top of mt.

36 Melochia
occasional in open places

37 Macaranga
occasional in forest, especially in openings
38 Flagellaria indica
occasional in brush or trailing woods on or near ridge top
39 Cold Blagflum ivopleyflum
common in forest
40 Randia carolinensis
common in forest

"fetin" (applied to grass in general)

small tree, flowers yellow, seeds red. (fl. & fruits from different trees)
"amasés"

great vine climbing in trees, fruit green, rhizome creeping among roots. "ngá" "meratu"

small tree, inner bark with strong oily odor, flowers white "anpit"

vine, flowers purplish, seeds red with black eye. "kasis"

bush 1.5 m. tall, flowers white, fragrant. "chem"

shrub 4 m. tall, fls. pink "tup" (name also applied to Macaranga.)

shrub 4 m. tall, fls. greenish. "tup" (name also applied to * 24536)

vine climbing in trees, fruit pink, thinly fleshy. "nigasu" (h)

large tree. "(h) egits"

small tree, 5 m. tall. ~~"egits"~~ "kisinom"

24541 Polyscias (Nandejdia / Ma)
~~op~~ semi open ridge

42 Glochidion
common in forest

43 Canavalia microcarpa cathartica
very common, especially in openings and around edges of forest

44 Fagraea berlinae var. pogae (Tonk) Fosb.
occasional in forest

45 Clerodendron
~~shrub 1.5 m. tall~~ near lower edge of forest

46 Ficus tinctoria
~~—~~ not common

47 Vittaria
on tree trunk. near lower edge of forest.

48 " "
on tree trunks

49 Polypodium scolopendrium
on tree trunk near lower edge of forest

50 Peperomia
on rocks

51 Ficus prolixa
ridge, open edge of forest

24548

bush, m. tall, leaves very glossy, odor slightly oily.

— small tree, flowers yellow "amasés"

Thomas large vine, climbing over trees. flowers magenta.

tree 10 m. tall, buds and immature fruits, fruits pendent "sour"

— shrub 1.5 m. tall, buds white (flowering and fruiting twigs from different individuals in same thicket" "etin" and "abuts" - two names from same ~~ste~~ informant - mentioned the fact that there were two.

— small tree, sterile "awan" (awan)

fronds leathery, arching.

"unen kalu"

small form "chiji" (chichi)

plant fleshy, (lvs. alt.)

small tree 5 m. tall, sterile "au"

1946 – 7 mts Ia (Carline)

24552 Randia carolinensis
common, this on near lower edge of forest.

53 Acalypha
rare, lower edge of forest

54 Piper
common

55 Lagenaria siceraria
stuff open slope below edge of forest

56 Ficus
common in forest, this one at lower edge.

small tree, flowers white
"kisinorn"

shrub 2.5 m. tall, fls. greenish, fruit green.
– vine climbing on tree trunks
"eras"
extensive vine with white flowers. Introduced by
– Japanese. herbage foetid.
large banyan tree, 10 m. tall, spreading, mass of trunks 2–3 m. through quite solid by anastomosis.
"ara".

May 29 - Nomwin I. ~~wood~~.
Luxuriant forest of Cocos, Artocarpus and other trees with dense undergrowth of Polypodium, Nephrolepis, Wedelia and a number of
24557 Crataeva speciosa

58 Cordia subcordata
near beach

59 Guettarda speciosa
occasional, especially near beach

60 Cassytha filiformis
near beach, parasitic on various plants

61 Terminalia ~~catappa~~ samoensis
near beach

62 Cucurbita pepo
~~central~~ ~~[illegible]~~ clearing

63 Fimbristylis cymosa var.
opening ~~[illegible]~~, common

64 Digitaria ~~[illegible]~~ marginata var. nivalis appearing only in clearings
opening, common

65 Thuarea involuta
opening, common

66 Pipturus argenteus ~~[illegible]~~
occasional toward outer beach

shrubs, laced with Piper and, especially around edges, with Canavalia.

"informant" ~~Af-kas~~ "Af Kas"

shrub, flowers white zygomorphic, petals on one side larger. fruit eaten when ripe. "~~afa~~ epuch"

shrub 3 m. tall (others seen larger), flowers bright orange. "annö"
wood used for outrigger booms.

shrub 3 m. tall (others seen large trees) "mosör"
wood used to carve bowls.

leafless vine greenish-yellow, flowers white, fruit green. "ölau" used to line an oven or "um"

bushy tree, 3 m. tall. "sin"
wood used for paddles

extensive creeping vine, leaves gray spotted, flowers yellow. "pakin"

tufts, leaves soft. "puken"
used as stomach medicine"

tangled

prostrate ~~[illegible]~~ with tips ascending, forming a loose mat.

shrub 2-3 m. tall, leaves whitish beneath. "aroma" used for fish lines (inner bark)

~~567~~ Pipturus argenteus
occasional toward outer beach

shrub 3 m. tall, "aroma" "applpet" leaves white beneath "amolaet"

68 Messerschmidia argentea (L.) johnst.
along outer beach

wood used for canoe connection & living goggles

bush 3 m. tall, others seen 4 m. fls. white, leaves fleshy, silvery green "amolaet" "amolaet" caive bowls from wood.

69 Triumfetta procumbens Forst.
along passage beach

stems prostrate with branches ascending, fls. yellow. "kunin"

70 Ficus tinctoria
occasional in forest

— small tree, 5 m. tall; big ripe fruit orange, very rarely fruiting. "awan" "aedan" — big crows eat them.

71 Eugenia javanica
occasional in forest

great tree 20 m. tall, 8 dm. thick; more or less cauliflorous, infls. both on trunk, limbs and smaller branches, fls. white. "fäniap" fruit eaten raw. wood used for outrigger booms.
— "selingen anu" (devil's ear)

72 Polypodium (Pleopeltis) lanceolatum (Blume)
on decaying log in forest.

pale green cushion "lumun nu" (coconut moss)

73 Leucobryum glaucum
on coconut tree trunk near beach

prostrate; leaves sub-fleshy, white beneath; fls. white "opuson"

74 Hedyotis biflora
on ground in forest in a spot free of undergrowth

erect herb. "likö" may be pronounced "ligö".

75 Achyranthes ~~indica~~ aspera
scattered especially along trails and in openings

24576 Callicarpa candicans (Burm.) Merr.
rare, one seen in open woods
"apui" used for booms on model canoes.

77 Tacca leontopodioides
common especially in open places
found on all small islands.

78 Morinda citrifolia L.
common

79 Guettarda speciosa
occasional in forest

80 Piper fragile
very abundant

81 Wedelia biflora
abundant, one of principal
plants in undergrowth

82 Glochidion sp.
common in undergrowth

83 Polypodium scolopendrium
common, forming a large
part of undergrowth
on ground and climbing on trunks

84 Nephrolepis hirsutula
most abundant plant
in undergrowth.

shrub .8 m. long, fls. purple

→

scape erect, leaves
with 3 main divisions
"mok(u) mok" starch made from tubers
usually wild but sometimes planted.
shrub 2-3 m. tall,
fl. & fruit white. "nen"
(in Truk "äring" or "nobui".
fruit eaten in time of famine.
suckers shoot from tree
10 m. tall, 5 dm. thick.

vine on ground and
climbing on tree trunks,
sterile. leaves glossy.
"atukupui"
erect, 1-2 m. tall, fls.
yellow. "atuat"

shrub 1-3 m. tall, fls.
yellow, fruit green.
"efor" used for house rafters.

"chi(i) chi

fronds more or less
erect, spreading by stolons
"amere"

24585 Scaevola frutescens
fringing the beaches, not in forest

86 Canavalia cathartica Thouars
very common, especially near beaches, ~~climbing~~

87 Plumeria rubra L.
cultivated ornamental

88 Hernandia ~~ovigera~~ sonora L.
cultivated ornamental

89 Dioscorea bulbifera L.
occasional in forest

90 Alocasia macrorhiza
very common both in swampy land and about houses in the village, actually becoming weedy

91 Artocarpus altilis
forming a dense forest ~~in center of~~ in center of island back of village elsewhere mixed with Cocos.

92 Auricularia
on rotting breadfruit log

93 Eleusine indica (L.) Gaertn.
one plant only seen on pier

94 Fimbristylis cymosa R.Br. var.
rare on sand spit (with # 24597)

shrub 1.5 m. tall, rounded, spreading, fls. white, fruit white, fleshy. "nat"

vine, climbing over trees, fls. rose pink. pods on dead vines. "wal" leaves used for medicine for stomach. lais from flowers.

small tree "sōn".
latex abundant, fls yellow and cream.
shrub 2 m. tall leaves glossy.
vine, sterile.

plants all sizes, up to 1.5 or more m. tall, caulescent. "kä"

great trees up to 25 m. tall fruit rather small and cylindric.

gelatinous, tough.

tufts; leaves stiff

24595 Euphorbia chamissonis Bas.
common very locally on sand spit.

96 Portulaca ~~quadrifida L.~~ sarmentosa v. Poelln.
only one small plant seen on sand spit.

97 Fimbristylis cymosa R.Br.
common on sand spit. (with # 24594).

98 Halophila hemprichii
abundant in shallow water of lagoon near shore

99 Colocasia esculenta
cultivated in trenches dug down to water level in forest.

merKussii (Hassk.) Schott. DHN: 6/1998

24600 Cyrtosperma chamissonis
cultivated in trenches and marshy places dug down to water level.

01 Pandanus tectorius
common on ~~[illegible]~~ outer beach

02 Musa sapientum
planted in trenches in forest, with aroids, not abundant.

03 Soulamea amara Lam.
common locally on broken coral near outer beach

plant spreading-ascending, lactiferous, sub-fleshy, ~~not~~ leaves whitish beneath, fls. greenish, slightly sticky.

" ~~not~~ :
– plant prostrate, leaves fleshy, flower yellow, 1.5 cm. across.
– tufts, leaves stiff.

rhizomes and leaf bases white.

sterile; petioles green, other plants seen with reddish petioles.

plants up to 2 m. tall, prickliness variable (leaves from different plants).

pyramidal tree 6 m. tall fruits from ground beneath. (a much longer leaved form planted in interior, used for weaving mats.
– plant about 2 m. tall, young

shrubs 2-3 m. tall

24604 Crataeva species
common, especially in village
05 Terminalia ~~catappa~~ samoensis Rech.
rare, near outer beach
06 Calophyllum inophyllum
occasional, this one near inner beach.
07 Digitaria species var. microbacha appendiculata var. species
common near inner beach
08 Leptonus repens var. microbacha
common to occasional near inner beach

Island flat, no trace of raised coral. mostly sandy except on outer beach and a narrow strip in from it, which are of broken coral. The central part of the island is occupied by a dense forest of great breadfruit trees, up to 20 or 25 m. tall. Where this breadfruit is thickest, the undergrowth is rather sparse, but toward periphery the breadfruit becomes mixed with coconut and not so dense. Here the undergrowth of Nephrolepis, Polypodium, Wedelia, Piper becomes very dense and 1-1.5 m. deep, with common shrubs or trees of Glochidion, Ficus tinctorius, Morinda citrifolia, Eugenia, etc.. Toward the outer beach Pandanus, Cordia,

Guettarda species

nomwin).

fl. white.

small tree 4 m. tall, flowers white.
small, sterile tree 6 m. tall.

creeping

Especially toward the beaches generally, it is abundant and completes the trees and shrubs.

Pipturus, Messerschmidia, Terminalia and #24603 become common. Scaevola forms a dense fringe around the outer and passage beaches, growing to a height of 3 or 4 meters.

In small openings and clearings Fimbristylis, Digitaria, Thuarea, and Leptonus cover the ground. In open places very near the beach Triumfetta is common, Fimbristylis is more common than inland, and Cassytha is common, strangling everything from grasses to small trees. On a sand spit running out along the reef Scaevola and Messerschmidia are the dominant plants, forming an open bush, while two

forms of Fimbristylis cymosa, Euphorbia sp. are common in the intervals. Here a single plant of Portulaca quadrifida and a small sterile seedling of Ipomoea pes-caprae were seen.

Tacca, Dioscorea, and one or two sterile Ipomoeas are scattered over the island. The Tacca is used to make starch and, though usually growing wild, is occasionally deliberately planted. It was not seen on the beach.

Around the village and scattered houses the most conspicuous plant besides Cocos, is Crataeva, which is planted everywhere to furnish fruits for food. Hedges are made up of a Hibiscus (rosa-sinensis or a hybrid), and a sterile Polyscias with finely cut leaves. Plumeria is occasional, as is a large Crinum (both a white and a red form growing together). Alocasia macrorhiza is common everywhere about the village, even becoming weedy and growing in much reduced form along paths. Pandanus is occasional, but was all sterile.

Toward the interior a series of excavations have been made and filled with organic matter, forming a peaty muck. Here Cyrtosperma and at least 2 forms of Colocasia are grown, with Alocasia and Musa on the slightly higher but wet ground around them.

The Artocarpus is quite variable in leaf outline and fruit shape, size, and surface. Pelzer and Elbert got names of a dozen or more varieties. I had no time to make any attempt to study them.

The Pandanus observed growing commonly along the outer beach (# 24601) is a short leaved small fruited form. Inland a Pandanus is commonly planted, apparently for mat-weaving, which, perhaps because of habitat, is much more luxuriant and longer leaved. It was all single erect stems about 1-1.5 m. tall.

Cucumbita pepo was occasionally cultivated but did not appear to fruit much.

Obviously Cocos nucifera and ~~Spondias~~ Artocarpus altilis are the important food plants. Alocasia and Cyrtosperma are also important. Crataeva, Cordia, Pandanus, Eugenia, Ficus, and Morinda furnish fruits that are eaten. Colocasia is a food plant, but was not seen in any great abundance. Cucumbita is not abundant. Judging by the size of the Musa plants, they have not been cultivated for any length of time yet and must be in a more or less experimental stage. It was not discovered whether or not the Dioscorea is eaten. Ipomoea batatas ~~was~~ is very sparingly planted but obviously does not thrive.

The wood of Glochidion is used for house rafters, that of Artocarpus for general construction and apparently canoe hulls, that of Eugenia and Cordia for outrigger booms, that of Messerschmidia for carved bowls, diving goggles and canoe connectives, that of Terminalia catappa for paddles, and that of Guettarda for carved bowls.

The inner bark of Pipturus is used for fish-lines.

Pandanus leaves are used for weaving mats.

Coconut leaves are used for house coverings, rough baskets, young leaves for fans and hats, etc.

Canavalia and Fimbristylis are said to be used as medicines for stomach ailments.

Cassytha filiformis is said to be used to line ovens.

Leis are made from Canavalia flowers and Plumeria flowers are worn in the ear by young peoples to indicate that they are thinking of the opposite sex.

The Truk Archipelago is extremely varied in topography, soil and underlying rock. It is an enormous barrier reef with a number of motus. Inside are numerous islands of all sizes, from high mountainous rugged ones to small flat coral islands.

On the volcanic islands parts are underlain by deeply weathered tuff, part by hard flow lava. Some have the lower terraces of coral rubble. Great talus slopes have accumulated at the foot of the basaltic cliffs on such ~~the~~ islands as ~~the tuff, especially~~ Tol and Dublon. This has become weathered in most places.

The tuff, especially, has weathered into a dark red-brown sticky soil with a high colloidal content, as evidenced by cracking when it dries out.

The high islands were obviously once forested. Now only remnants of this forest persist on the highest peaks and high, steep slopes on a few of the larger islands, as Tol (best), Dublon, Tefan, Moen. Important trees in this are Cynometra, Ficus (tinctoria and sp. #24556), Calophyllum inophyllum, Randia carolinensis, #24463, a ptychospermate palm, Glochidion, Macaranga, Fagraea, several Araliaceae, and several others. ~~Trees~~ Shrubs, as Psychotria (24456, 24457), Acalypha, Piptum (24464, 24467), Clerodendron (24545), Allophyllus (24553), are reasonably common. Croton (24535), Pittosporum, Psychotria (24460), etc. are rare. On the ground, at least along trails,

Geocardia herbacea and Centotheca latifolia are common, the latter making up much of the ground cover, along with several ferns. Piper (2 sp.), Columella (?), Ipomoea sp. (24418), Merremia, and, in places, Canavalia are common vines, but perhaps with the exception of the Pipers and Columella may be invaders from below where the forest has been damaged. Pothos (?) (24531) is occasional as a liana climbing in trees. ~~This forest was not seen~~

This forest was not seen anywhere below about 200 m. and varied in composition, but not much in aspect, from place to place. The higher portions are true montane rain-forest, with leaf epiphytes abundant. Trunk epiphytes, mostly Polypodium, Vittaria, etc. are common throughout.

Something similar to this may well have been the natural vegetation from the foot of the slopes up to 200 m., as in places higher where the forest was destroyed or damaged, the plants that tend to come back are those commonly found on the lower slopes. Here the natural forest has been

completely destroyed, probably for a long time, and replaced by a forest-like cover of Cocos and Artocarpus, with various subsidiary shrubs and small trees and a ground cover of grasses and ferns. Oplismenus, Centotheca, Nephrolepis, etc are common in this. Many weeds are abundant. These have been much encouraged by the cutting of considerable areas of the breadfruit and coconut during the war by the Japanese. Paspalum ~~dilatatum~~ ~~P.~~ conjugatum, ~~and~~ scrobiculatum, abiculare, Emilia sonchifolia, Sida acuta, Ageratum conyzoides and many other weeds are common. Ipomoea sp. (24418), Merremia, Canavalia, etc. cover large areas. In some open places small areas of Miscanthus japonicus are found, but not as abundant as might be expected.

The aggressive secondary shrubs & small trees that tend to come in here are Glochidion, Acalypha, Macaranga, 2 Sterculiaceae, Morinda citrifolia, etc.

In the openings cleared

by the Japanese every available square foot was planted to sweet potatoes and manihot. The natives are neglecting these, especially the sweet potatoes now and grass is taking possession, growing very luxuriantly.

Mangifera indica is scattered here and there, as are thickets of Hibiscus tiliaceus

Shrubs and vines follow and already the Japanese trails are so overgrown that they cannot be used. Erosion does not long remain a serious problem, as the growth is very heavy.

The terrace at the foot of the slope is usually little above sea level. In most places it is fringed with typical mangrove swamp, with 2 sp. of Bruguiera, Rhizophora mucronata, Sonneratia caseolaris, ~~Exp~~ Excoecaria agallocha, and two other trees very common. Rhizophora usually dominant, Acrostichum aureum common, also Clerodendron sp.

Back of this is land that is occupied by houses, door-yard cultivation such as Citrus

& aurantiifolia, bread-fruit, coconut, Alocasia, ~~etc.~~ Carica, Manihot

Here also are fresh or brackish marshes with great masses of Scleria, etc. and where Colocasia and Cyrtosperma are cultivated. Ipomoea reptans is common here, said to have been introduced by the Japanese. It is eaten as greens. A large grass occupies great areas of marsh on Moen. In more brackish areas Paspalum vaginatum forms pure stands. Cyperus javanicus is common.

great Pleuropitos brakes

Along tidal channels into these marshes are thickets of Barringtonia racemosa and Nipa fruticans.

Spontaneous trees and shrubs are Mangifera, Morinda, Hernandia, Hibiscus tiliaceus, Thespesia, Pandanus, etc. Ceiba and Casuarina appear to be planted.

Some of the common tropical cultivated plants are raised in dooryards as ornamentals - Hibiscus rosa-sinensis, Allamanda, Lantana, Polyscias (2 sp.), Euphorbia heterophylla,

Weeds are the most obvious part of the vegetation – ~~the~~ Eleusine indica Jussiaea suffruticosa, Urena lobata, Sida acuta, Luffa cylindrica, Cenchrus echinatus

Vigna marina in places covers large areas. Just below headquarters it has spread up the lowermost slopes and is covering some of the bare scars of bulldozer activity, preventing erosion.

Nisding

2466a – 2466j

2466k, 2466l

2466m

2466n

2466o

2466p

2466q

2466c

rolines)

d main
olen, Moen I.
g Mt.)
dfruit and
of it cleared
sweet potato
h overgrown
lum con-
rolviculatum(?)
), Scleria sp.,
previous
vines of

ense (Kanel.) Mkgff.
ods on ridge

10 Randia carolinensis
common in woods on high ridge

11 Ficus
common in woods on high ridge, this specimen, at least, a strangler, growing around a Schefflera

12 Schefflera
occasional in woods on high ridge

13 Digitaria
abundant on upper open slopes

main ridge with patches of original forest alternating with cleared places, these on more or less level places. Forest of Ficus, Cynometra, Schefflera, etc, quite wet, trees large

Tree 8 m. tall, 2.5 dm. thick, wood rather hard, fruits pale green, skeletons of old ones persisting on whole tree.

— shrub 3 m. tall; flower white, odorless, fruits not mature.

— large tree, with a mass of trunks; fruit pinkish.

fairly large tree, being strangled by Ficus, about 8-10 spikes at summit of branch, flowers white, fruit green.

— tangled culms forming a heavy ground cover.

June 2 - slopes and main ridge of Mt. Teroken, Moen I.
(Chuhumong Mt.)
slopes with breadfruit and coconut, much of it cleared and planted to sweet potatoes now very much overgrown by grasses - Paspalum conjugatum and P. scrobiculatum(?) Digitaria sp. ( ), Scleria sp., Miscanthus japonicus forming thickets, vines of Merremia, etc.

2 609 Astronidium carolinense (Kanel.) Mkeff.
occasional in woods on ridge

10 Randia carolinensis
common in woods on high ridge

11 Ficus
common in woods on high ridge, this specimen, at least, a strangler, growing around a Schefflera

12 Schefflera Hassemer Harms
occasional in woods on high ridge

13 Digitaria
abundant on upper open slopes

main ridge with patches of original forest alternating with cleared places, these on more or less level places. Forest of Ficus, Cynometra, Schefflera, etc., quite wet, trees large.

Tree 8 m. tall, 2.5 dm. thick, wood rather hard, fruits pale green, skeletons of old ones persisting on whole tree
shrub 3 m. tall; flower white, odorless, fruits not mature.
large tree, with a mass of trunks; fruit pinkish.

fairly large tree, being strangled by Ficus, about 3-10 spikes at summit of branch, flowers white, fruit green.
tangled culms forming a heavy ground cover.

June 3 - Pis I., north side of Truk Barrier Reef.
flat coral island with a little slightly raised coral at west end, completely wooded, mostly with Cocos and Artocarpus. rocky toward outer beach, sandy over most of island, large depressions filled with muck in interior where Cyrtosperma is raised extensively general undergrowth of ferns and Wedelia, grass in openings.

24614 Ximenia americana L.
rare, at top of outer beach

15 ~~Calophyllum~~ Terminalia
occasional around beaches

16 ~~Calophyllum~~ ~~Pongam~~ Ochrocarpos odoratus
rare, one plant seen

17 Scaevola frutescens (Mill.) Ks.
common, fringing outer and passage beaches

18 Fimbristylis
occasional, common on outer beach

19 Triumfetta procumbens
occasional on beaches, shaded.

20 Cordia subcordata Lam
along beaches, especially inverse, near houses.

Cucumbita pepo = "pakin"
Carica papaya = "kipau"

bush, 1.5 m. tall, rounded, weakly spiny, leaves thick, yellow-green; flowers yellow within, green without. "anno" or "ano"

— shrub 2 m. tall, leaves leathery, flowers white "sin"

— Raf.) Merr. shrub 1.5 m. tall, sterile. "~~ahit~~" "nanin"

rounded shrub 3 m. tall, flowers white. "not"

caespitose tufts, leaves not especially stiff. "pohes"

— stems prostrate, branches erect; fls. yellow. "kinin"

tree 6 m. tall, rounded; flowers orange, fragrant. "anikat"

24621 Cassytha filiformis L.
common on outer beach,
parasitic on various low plants.

22 Crinum
commonly cultivated

23 Glochidion
occasional in undergrowth

24 Ixora macrothyrsa Case Hanc
rare, cultivated as ornamental

25 Rhoeo discolor
persisting after cultivation

26 Eragrostis amabilis
weedy sandy places near inner beach,

27 Eleusine indica (L.) Gaertn.
weedy sandy places near inner beach.

28 Digitaria
common in open sandy places, especially near inner beach

29 Portulaca quadrifida
common in weedy places outside of forest, along road

30 Boulamea amara Lam.
common along outer beach on rocks

leafless, stems yellow-green, flowers white, fruit green. "ik"

— plant 1 m. tall, fls. white (red flowered form also grows with it). filaments purple. peduncle slightly compressed "sip"

— shrub 1.5 m. tall, fl. yellow. ~~"fos"~~ "efos"

— shrub 2.5 m. tall, inflo. dull red, flowers scarlet. "atin"

under sides of leaves and bracts maroon-purple, said to have been introduced by Japanese. leaves fleshy, brittle.

— spreading tufts.

tufts.

covering ground.

prostrate, flowers yellow. root enlarged, plant fleshy, leaves in flat masses. "chinkis"

— shrubs 2 m. tall, flowers whitish, fruit green. "maras"

1946 - Pub Ds. (Carolines)

24631 Plumeria rubra L.
cultivated sparingly

" "

32

large beds in shallow water on fringing reef in lagoon almost exposed at low tide.

33 Polyscias guamensis (Seem.)
shade, especially in edge of forest.

34 Ipomoea alba L.
edge of forest near water beach

35 Oplismenus compositus
common in forest, carpeting ground

36 Ipomoea littoralis Bl.
occasional in woods

37 Dioscorea bulbifera
common in woods

38 Achyranthes aspera
rare in woods along trail

39 Hymenocallis littoralis
rare in small clearing

40 Paspalum conjugatum
common along trails and in slight openings in woods

small tree 4 m. tall, very lactiferous; flowers fragrant, cream and yellow.
"semi"

succulent, thizome white, leaves distichous.
"muchanneh" or "anot"

with celery odor when broken
shrubs less than 2 m. tall, fruiting when less than 1 m. inflorescence very lax. "atenichen"

vine climbing over shrubs
"apamach"

prostrate to ascending, loose

sterile vine "mke" or "mge"

vine climbing on shrubs and trees, sterile, tubers eaten by natives. "apuneka"

erect herb 1 m. tall.
"nikike"

flowers white, peduncle compressed, with sharp edges. "sip"

spreading by runners, forming a dense growth.

24641 Wedelia biflora
one of dominants in undergrowth
42 Artocarpus altilis
about dwellings

43 Bruguiera
in marshes on the landward side of the road on passage beach.
44 Asplenium nidus
on coconut stumps, rare

45 Premna obtusifolia R. Br. (Verbenaceae)
edge of forest, near dwellings
46 Clerodendron
small marshy places

47 Flemingia
on coral boulders and along road
48 Guettarda speciosa
occasional along beaches
49 Dryopteris goggilodus
seen only in much soil in Cyrtosperma patch
50 Nicotiana tabacum L.
cultivated around dwellings, a few plants at a time
51 Polyporus sanguineus L. ex Fr.
on old rotting post
52 Schizophyllum commune Fr.
on old rotting post

erect herb 1 m. tall, flowers yellow "atuot"
— tree 10 m. tall, fruit immature, seed bearing variety "mai" or "oreai"
— small tree 3-4 m. tall calyx green, petals dull orange. "ong"

small plants, not especially thriving "nuk"

shrub 4 m. tall "umubau"

scrambling shrub, forming low thicket, corolla white, stamens purple. "apuech"
— stems red, fleshy, petioles and cymes red. "anifitnu"

shrub 2 m. tall "mosoi"

all plants examined were sterile. "amäre"

herb 1 m. tall, flowers pink "suba"

color orange-red, deeper below. "seringen ano"
— color dull white

1946 Truk Is. (Caroline Is.)

24653 Crataeva ~~religiosa~~ speciosa Volk.
sparingly cultivated "

54 Pittosporum
sparingly cultivated around houses, said to have come from Pis I., not from higher islands.

55 Messerschmidia argentea
common along outer and passage beaches

56 Hernandia ~~peltata~~ ovigera
one plant seen along ~~passage~~ west beach

57 Vigna marina
common near beaches

58 Hedyotis biflora
common in disturbed places

59 Lepturus repens (Forst.)
occasional near outer and passage beaches

60 Derris trifoliata
common in edge of forest and around eroded coral boulders near ~~pass~~ west beach

61 Ficus tinctoria
occasional in forest

62 Callicarpa
rare in edge of forest at west end

Pis I.

shrub 2-3 m. tall, sterile.
"apuch"
small shrub 1.5 m. tall. inner bark with an oily aromatic odor, said to be used to rub on hair. "amenges"
small tree, leaves fleshy, silvery green, flowers white, somewhat fragrant. "chen"
small sterile bush 2 m. tall, leaves somewhat fleshy. "akmang"
prostrate, carpeting ground, peduncles erect, flowers yellow, keel straight. "nönuka"
prostrate; leaves sub-fleshy, pale beneath; flowers white, tube swollen, lobes divergent. "sing"
spreading by runners

leathery leafed vine, leaves glossy, dark green, unifoliate and trifoliate on same plant. "unenipot"
shrub 2 m. tall, sterile
"auan"
shrub 2 m. tall "koti"

724663 Morinda citrifolia — shrub 2 m. tall "nobur"
common

64 Pisonia grandis — seedling, no large plants seen. "nok"
rare on west end

65 Canavalia microcarpa (cathartica Thouars) — large vine, flowers rose pink "ouka" "ouka"
occasional on west end and in edges of forest

66 Pemphis acidula — small trees, flowers white (mostly fruiting) young leaves thin, astringent & tart, older ones fleshy, salty-astringent. "engi"
common on eroded coral blocks at west end

67 Terminalia catappa L. — shrub 3 m. tall, flowers white "asai"
one seen, near habitation

68 Vernonia cinerea — flowers purplish.
occasional in disturbed places.

69 Euphorbia prostrata — prostrate, stems red. "kichich"
common around village

70 Physalis — flowers pale yellow with maroon center "tomato" plant purplish
rare in disturbed ground

71 Euphorbia hirta
occasional in sandy place among dwellings

72 Phyllanthus amarus Schum. & Th. (H. D. L. Webster 1955) ~~niruri~~ L. — erect (others seen much taller) heads magenta
common in weedy places

73 Gomphrena globosa
cultivated (rare)

74 Mirabilis jalapa L. — bushy herb 4 dm. tall "meribia"
cultivated (rare)

75 Cyperus javanicus — caespitose, tracts exceedingly long (other plants seen smaller) "nikaunon"
occasional

x Stachytarpheta — herb 0.3 m. tall, flowers deep purple-blue "sagura"
rare in weedy places

1946 Truk Is. (Carolines)

24677 Psilotum nudum
rare at base of coconut
in edge of forest

78 Nephrolepis
abundant in undergrowth

79
common in undergrowth

80 Acrostichum
[illegible]

81 ~~Asplenium granulare~~
common [illegible]

82 Thelypteris [illegible]
common [illegible]

83 Cyclosorus [illegible]
[illegible] "long" [illegible]

84 Pleocnemia [illegible]
[illegible]

85 "Tonkel" [illegible]
common along [illegible]

86 Pteridium [illegible]
[illegible]

87 Cordyline [illegible]
[illegible]

caespitose

[illegible] "amäre"

[illegible] "ererión"

[illegible] "manon"

~~"manon"~~
~~"fetin niap"~~ "fetin niap"

"fetin"

"rekit"

"pönö"

"nikolokot"

"chichi"

"tin"

90

on rotting log

June 4 - Moen I., saddle bet. Mt. Teroken and Mt. Tonaachau

91

on rotting stump partly covered with earth.

The coral island flora, as exemplified by Pis I. is rich, compared with many such islands. The rainfall is so high that a tall forest of Cocos and Artocarpus is supported, with deep undergrowth of Wedelia, Acalypha, Nephrolepis, Polypodium, Polyscias, and with deep grass - Paspalum conjugatum, Digitaria, etc. in disturbed places. In the undergrowth shrubs of Ficus tinctoria, Glochidion, Morinda, etc. are occasional. Extensive low areas, even several acres, possibly artificial, are filled with deep soft muck. Here Cytosperma is abundant.

Dipt. is common on tree trunks.

On raised limestone, of which there is little on Pis, Pemphis acidula grows to small

"seingen anu"

glows in darkness with a strong green light.

tree size. Scaevola, Leptum, Messerschmidia, etc. are only found on the extreme edges, at the top of the beach, especially on the outer beach, which has a strip of ~~[illegible]~~ Messerschmidia, Pandanus, Boulavea, etc. fringed with Scaevola. Ipomoea alba is ~~[illegible] such as Piper sp. Canavalia~~ found sparingly here, also Canavalia. Vigna marina covers some of the opener land, with Triumfetta, Cassytha, Tbouarea, etc.

Principal ~~[illegible]~~ food plants are Cocos, Artocarpus, Cytosperma, with Musa, Cnataeva, Pandanus, Ipomoea batatas

Tobacco is sparingly cultivated.
Ornamentals are Crinum (2 forms - white & red), Hymenocallis, Polyscias sp., Plumeria, Gomphrena globosa, Mirabilis, etc.

Trees around the village are Cordia subcordata, Thespesia, Hernandia, Terminalia sp., Pittosporum, Cocos, Artocarpus

A slight development of mangrove formation is evidenced by a few Rhizophora and Bruguiera trees.

The relatively richer flora of Pis than Nonouin may well be a reflection of the nearness of high islands. Acalypha, Pittosporum, Cordyline, Opeismenus, Phyllanthus, Bruguiera, Dryopteris, Psilotum, Derris, Vigna, Maniscuris, etc. and many weeds may be evidence of this. Both natural means and frequency of human transportation are probably involved in this.

June 5 – flats near Baker Dock
Moen I.

Broad flat of somewhat raised coral gravel. Opening weedy, with Cleusine, several Euphorbias, Digitaria, Paspalum conjugatum, Ipomoea, Piper, Fimbristylis, Lida acuta, etc.

Mangrove swamp occupies a portion of this, mostly Rhizophora but considerable Sonneratia. Some Bruguiera, Excoecaria, Scaevola, Lumnitzera, Allophylus, etc.

One part has large Artocarpus

24692 Ipomoea littoralis Bl
very common on sandy flats and at edge of mangrove swamp

93 Fimbristylis
roadway of coral across mangrove swamp

94 Glochidion
occasional on coral flat

95 Carica papaya
common on coral flat

with vines – Piper, Ipomoea, Wedelia (!) climbing up trunks, some Pandanus, 2 sp. Glochidion, etc.

Tacca is occasional. Cyperus sp., large grass, sterile Miscanthus japonicus.

herbaceous vine, on ground and climbing over bushes, flowers still open at 10 a.m. bright rose-purple, deeper in center.
– caespitose, leaves only somewhat stiff.

small tree, fruit with base of style enlarged, dark green; fls. yellow-
– erect dioecious plant, single stem with crown of large leaves, flowers white, this tree male. Fruits seen on others all very small, 5 cm. diam. spherical.

24696 Glochidion
occasional on coral flat

97 Piper
common climbing on tree trunks on coral flats

98 Wedelia biflora
common climbing on tree trunks on coral flats

99 Phragmites karka
very abundant in open coral flats in wet places

24700 Lida acuta
common weed on coral flat

01 Cyperus
coral road in mangrove swamp

02 Thuarea involuta
common on open coral flat

03 Tacca leontopodioides L.
~~common climbing on old coconut stumps on open coral flat~~ scattered on coral flat.

04 Piper
common climbing on old coconut stumps on open coral flat.

05 Digitaria pruriens var. minutiflora
occasional on open coral flat

06
mangrove swamp on coral mud

07
mangrove swamp, edge

moen).

small tree, fruit pale green without enlarged dark green style base.

leaves dark green, rip spike crimson. Plant with slightly peppery odor. vine-like, elongate, flowers yellow.

great masses 2 m. or more deep.

pls. orange yellow, plant up to 0.8 m. tall. small tuft

~~vine, leaves chlorotic.~~
acaulescent, scapes up to 1 m. tall leaves 2/3 as tall, linear bracts purple, pls. green.

vine, leaves somewhat chlorotic.

approaching var. pruriens

small tree, pls. white.

vine climbing in bushes and trees.

1.111 1946 Truk Is. (Carolines)

W4708 Barringtonia asiatica L.
mangrove swamp or coral mud

09 Allophylus
edges of mangrove swamp

10 Ficus tinctoria Forst
edges of mangrove swamp

Moen).

tree 6 m. tall.

shrub 2.5 m. tall,
fls. white; fruit scarlet.
double.
small tree, ripe fruit
bright orange

June 8, 1946 - Mt. Lasso, n. central Tinian I. 500 ft.
remnants of old forest persisting on dissected coral limestone around house

24711 Taeniophyllum marianense
epiphytic on Cynometra trees

12 Cynometra ramiflora
commonest tree

13 Pipturus argenteus

June 9, 1946 - "Palm Beach", west central coast of Tinian I.
near top of limestone sea cliff

14 Hedyotis foetida var. marianensis
rock ledges

15 Phyllanthus marianus

June 8, - Lake Hagoya, northern end of Tinian I.,
abandoned cultivated ~~at~~ ~~ion~~ ground

16 Amaranthus viridis
hard trampled ground

17 Lesbania cannabina

stuck flat to bark, fruit green, peduncle thick.
- tree 3 m. tall with buttressed trunk 3 dm. thick, leaves glossy dark green.
- small tree 3 m. tall, ripe fruit white, fleshy, leaves relatively smooth above.

sub-shrub up to 1 m. tall, with foetid odor when bruised, flowers white, corolla
- funnelform, lobes erect.
shrub up to 0.7 dm. tall, leaves sensitive, whole branchlets of them closing up when put in press.

prostrate

erect slender herb 2 m. tall, leaves somewhat sensitive, flowers yellow.

~~Mar~~ June 8 - south end of Tinian I. 250 ft.
limestone terrace

24717 shrubs

✓ 19 [illegible] (H.Sa) [illegible]
thickets

✓ 20 Jasminum mariannum DC.
thickets

✓ 21 Psychotria mariana
thickets

✓ 22 Eugenia palumbis Merr.
thickets

June 8 - plateau 1 mi. n. of Tinian, Tinian I. 250 ft.
cultivated in garden

✓ 23 Graptophyllum pictum

✓ 24 Pseuderanthemum atropurpureum

shrub 1-2 m. tall, scrambling, immature fruit dull pinkish.

shrub 2 m. tall, somewhat lactiferous; buds green.

scrambling shrub.

shrub 1 m. tall, flower white; fruit red. stipules ovate, not calyptrate.

low shrub 0.5 m. tall; fruit red when ripe.

bushy 1 m. tall, leaves with irregular white centers, some twigs with leaves green; flower purple.

shrub 1.5 m. tall, leaves deep irregular bronze-purple; corollas with one erect, 2 horizontal and one downward-pointing lobe, pinky, closely speckled with deep pink.

June 8, - Camp Churo, near center of Tinian I. 100 m.
roadsides and cultivated ground.

24 T 25 rust on Euphorbia prostrata

26 Bauhinia monandra
cultivated ornamental

27 Cassia glauca
cultivated ornamental

28 Zoysia matrella
cultivated as lawn

June 9 same

29 Amaranthus viridis
near buildings, occasional

30 Amaranthus spinosus
near buildings, common

June 9 near Marpo Wells, Tinian I.
abandoned cultivated land, in and around large sink-hole.

31 Ficus
roadside

32 Phragmites karka
deep ~~[illegible]~~ lake in bottom of sink-hole

33 Dioscorea elliptica
around bases of trees in sink hole.

causing the normally prostrate host to grow erect.

shrub 2 m. tall; flowers pink, lower petal conspicuously spotted with red.

small tree 3 m. tall, leaves slightly glaucous, flowers yellow, forming a dense soft carpet, not pungent.

erect herb, branching

erect herb 1 m. tall, stem fleshy, branching.

banyan-type of Ficus, dense rounded top; figs green. canes 2-3 m. tall.

sterile woody vine; leaves glaucous beneath.

June 8-13. Tinian Island is composed of a series of elevated terraces of reef limestone, representing at least 4 levels of elevation, separated by lines of cliffs. The surfaces of these terraces or benches are covered by soils varying in color and thickness from level to level. Some faulting has obviously taken place, resulting in slightly tilted terraces and several apparent levels that probably do not represent still-stands in the history of the elevation of the island. There are several large limestone sinks, so old as to be now merely small valleys with no outside drainage. One has a small lake. There is at least one small basalt outcrop, overlain by limestone, at Marpo or Carolina Ridge. This is so small that it probably has no influence on the vegetation.

The edges of the terraces above the sea cliffs and bluffs in many places have lost their soil, or

never had any, and are bare, rough, usually more or less dissected coral limestone. There are few beaches of any size on the island.

No trace remains of the original vegetation on the terraces, except where there are outcroppings of dissected limestone. The Japanese placed every square meter of land with enough soil into sugar, ~~and~~ napier grass and ~~the~~ sweet potatoes. Later the U.S. agencies farmed some of this land quite intensively. Now it has been abandoned for periods of upward of 2½ months. A vigorous weed vegetation has developed, so much so that it is hard to believe that such a short period has elapsed since the land was intensively cultivated. The most obvious and generally distributed plants are Paspalum conjugatum, two sp. of Ficus, Malvastrum ~~cor~~ coromandelianum, Crotalaria saltiana, Euphorbia hirta (a very coarse and luxuriant form), E. thymifolia and another prostrate sp. (cf. p. 192)

1946 Marianas Is.

24734 fuscidea [illegible]
bottom of sink, hole

35 [illegible]
coral limestone

36
coral limestone

37 Pisonia grandis R.Br.
coral limestone.

38 Mucuna gigantea
coral limestone

June 9 - a end of Masalog Ridge,
Tinian I.
brink of eroded limestone cliff
brushy vegetation

39 Jasminum marianum H.
very common in brush (and in all parts of island)

40 Cassia
common

41 Cardiospermum halicacabum
common

42 Colubrina asiatica
common

43 [illegible]
common

44 ~~Pseudosa~~ Pseudosa rotundifolia K. & [illegible]
common

herb 1 m. tall,
flowers yellow, 2-2.5 cm. across, petals yellow, ~~[illegible]~~ obcordate, dropping very easily.
— small tree or shrub,
— 2 m. tall, flowers white.
slender small tree 5 m. tall.
— tree 10 m. tall, fls.
— green, fragrant.
vine climbing over trees, flowers and fruits pendant.

scandent shrub,
flowers white, fruit
— green.
~~small~~ suffruticescent herb up to 1 m. tall, fls. yellow,
— leaves dull green.
vine on ground and climbing on shrubs, flowers white.
— subscandent shrub,
— leaves glossy, fls. yellow.
erect shrub 3 m. tall,
— fruit strongly divergent.
low shrub 1 m. tall, fls. greenish white, aromatic. (fruit from different bush) lvs. dull above.

24745 Phyllanthus [illegible]
common in openings

✓ 46 Capparis ~~cordata~~ cordifolia [illegible]
rare on edge of cliff

✓ 47 Psychotria marianensis
common

✓ 48 Canthium odoratum var. tinianense
common

✓ 49 Fimbristylis cymosa var.

✓ 50 Bikkia
common on brink of cliff

✓ 51 Bikkia
same

✓ 52 Bikkia
same

✓ 53 Gossypium hirsutum L.
common

✓ 54 Canthium odoratum var. tinianense
common

✓ 55 Annona squamosa
common

✓ 56 Canthium odoratum var. tinianense
common

shrub up to 0.6 m. tall.

leaves blue green, fleshy, low branched sub-shrub, one withered flower, buds with one side gibbous.

— shrub 1.5 m. tall, leaves stiff, stipules not calyptrate, flowers white, fruit red when ripe.

— shrub 1 m. tall, fls. white, fruit becoming black when ripe.

— caespitose on ledges at brink of cliff.

— small shrub 0.6 m. tall, fls. white. leaves fleshy same

same

shrub 1-1.5 m. tall, fls. cream, turning rose; fruit from different plant.

— shrub 1 m. tall fruit immature

— shrub 1 m. tall

shrub 1 m. tall, fruit immature

June 9 Tinian City, Tinian
small patch of woods
on dissected coral on terrace

29757 Psychotria marianensis

58 Ficus [illegible]

59 Ficus tinctorius

60 Canthium

61 Callicarpa

62
common.

63 Deerangia amaranthoides
rare

64 Cassytha filiformis L.
common, parasitic
on various plants

65 Passiflora foetida var. hispida (DC.) Killip
common everywhere

66 Polyalthia [illegible]
occasional

67 Albizzia lebbek
common

shrub 2 m. tall, fls.
— white, ripe fruit red.
open tree 6 m. tall, fruit
immature, largest ones
pinkish with red dots.
— banyan type
with aerial roots
shrub 2 m. tall (others
as large as trees), fruit
— yellow to orange.
erect shrub 2 m. tall,
— fruit green.
low shrub, 1 m. long,
buds deep purple, ripe fruit
— turning purple.
small tree, stigmas
— deep purple.
vine, spikes pendent

leafless, stems green,
flowers white; ripe
— fruit white, fleshy.
vine, climbing over
shrubs; fruit orange,
bracts deciduous when
— fruit is ripe.
tree 6 m. tall; leaves thin;
— fruit green.
tree 8 m. tall.

June 9 same
terrace just above ~~beach~~ sea
coral limestone about 5 m.
34768 Jatropha gossypiifolia
abundant over much
of island.

shrub 1-1.5 m. tall,
lower leaves green, upper
deep purple, glandular
hairs purple, green tipped;
flowers brick red; fruit
green.

69 Cyperus
common

tuft, spikes brown

✓ 70 Pemphis acidula
common very locally on
dissected limestone

low bushes up to 1 m. tall,
leaves astringent when
chewed; flowers white.

✓ 71 Hedyotis albidopunctata (Merr.) Fosb.
dissected coral limestone

leaves fleshy, paler
beneath; fls. white,
caespitose, leaves stiff.

✓ 72 Fimbristylis cymosa R.Br.
coral limestone

✓ 73 Hedyotis foetidissima var. marianarum
coral limestone, common

plants ascending, up
to 5 dm., leaves leathery,
foetid when broken,
buds white, few.

✓ 74 Scaevola frutescens (Mill.) Krz.
common

shrub 1-2 m. tall,
flowers white; fruit
white, fleshy when ripe.

June 9 near Marpo Wells, Tinian.
around buildings in abandoned
cultivated ground.

75 Boerhavia diffusa
occasional

prostrate from a heavy
root crown, stems up to 1 m.
long, branched; leaves white
beneath, not fleshy.

✓ 76 Desmodium triflorum
carpeting ground, widespread
on island.

prostrate; fls. purple.

June 9 - Mt. Lasso, Tinian I.
dissected limestone outcrop.
brushy tangled forest.

24777 Morinda citrifolia L.
common, widespread on island

✓ 78 Melanolepis multiglandulosa
June 10 common, widespread on island

79 Lida
common all over island
this plant sheltered.

80 Lida
common in abandoned fields
all over island (same as #24779)

81 Lida sp.
common in abandoned fields
all over island.

June 10 - near Lake Hagoya, north end of Tinian I.
strand vegetation on dissected coral, mainly Thespesia, Excoecaria, Pemphis, Messerschmidia, etc. with Ipomoea pescaprae on sand and Heliotis in rock crevices and cavities

✓ 82 Messerschmidia argentea (L.) Johnst
common

83 & 84 Excoecaria agallocha
commonest tree on dissected coral

shrub 2 m. tall, leaves
– glossy; fls white.
small tree 3 m. tall,
– fruiting spikes pendent.
bush 1 m. tall, leaves
dark green above, gray beneath.

rounded gray bush 1 m.
tall.

stems ascending,
branching and leaf arrange-
ment distichous, color
light green.

small tree 4 m. tall,
leaves fleshy, silvery green,
flowers white, fruit pale
– green, fleshy.
small lactiferous tree
4 m. tall.

24785 Fimbristylis cymosa R Br.
dissected coral
✓ 86 Thespesia populnea
common
✓ 87 Digitaria ~~marianensis~~ guadalcanalis
occasional in sandy pockets
✓ 88 Hedyotis albido-punctata (Men.) Fosb.
rocks ~~cracks~~ crevices and pockets

✓ 89 Ipomoea pes-caprae (L.)
sand, places, common
90 Vitex
common, back from shore
✓ 91 Ipomoea quamoclit L.
cultivated, climbing on wall around cemetary
92 Eragrostis
weed in cultivated ground (abandoned cult. ground)
✓ 93 Delonix regia
planted around settlements and along roads

✓ 94 Antigonon leptopus
planted around buildings
95
weed around buildings
✓ 96 Eragrostis amabilis L.
weed everywhere
97 Ipomoea
weed around buildings

caespitose, leaves not
— stiff
small tree, flowers
— pale yellow
rather stiff tufts.
— spikes appressed.
recumbent to ascending,
leaves fleshy, pale beneath,
flowers white, tube enlarged,
throat constricted, lobes
— divergent.
extensive vine, prostrate
— on ground.
shrub 2-3 m. tall,
— fls. purplish.
slender vine, flowers
scarlet.

spreading shrub

flat-topped tree 6 m. tall,
fls. scarlet, lower petal
at first pink with red
— spots, turning reddish.
vine; flowers bright
— rose pink.
low, spreading

prostrate, creeping on
ground, fls. purple, closing
at about 10:30 a.m.

24798 Chloris inflata
common along roadsides
✓ 99 Dactyloctenium aegypt[illegible]
common everywhere
24700 Euphorbia
common everywhere
✓ 01 Euphorbia hirta
abundant everywhere
✓ 02 Euphorbia prostrata
abundant everywhere
✓ 03 Phyllanthus ~~niruri~~ amarus Schum. & Th. det. G. L. Webster 1956
abundant everywhere.
✓ 04 Boerhavia ~~diffusa~~ repens
common
✓ 05 Bambusa blumeana Schult. f. det. F. A. McClure
planted

✓ 06 Bambusa vulgaris Schrad. ex Wendl. det. F. A. McClure
planted

✓ 07 ~~alpinia~~ Alpinia speciosa
planted

✓ 08 Carica papaya
& common everywhere

Tufts

spreading, rooting
— at nodes.
prostrate, plant green.

decumbent base, tips
ascending and arching,
— unusually luxuriant.
— prostrate, plant purple.
erect

prostrate, stems elongate,
— fls. pinkish
clumps with culms crowded
rather closely, dark
green, up to 6' m. tall.
lower branches very
spiny, forming a tangle
— sheaths from 4th & 5th nodes
clumps with culms
from 5 to 15 cm. apart,
up to 6 m. tall, dark green,
sheaths from 5th node,
culm sample 4th & 5th nodes.
— (young & old culms)
large clump 7 m. tall,
fls. ~~[illegible]~~ white with
red tips, lip yellow
— marked with red.
columnar soft stem
with crown of large
leaves, fls. white ♂.

June 10 Marpo Valley, near Marpo Wells, Tinian Island
limestone slope, abandoned orchard

54809 Terminalia catappa L.
near house

✓ 10 Polyalthia ~~[illegible]~~
common second-growth tree

✓ 11 Canthium
second growth in orchard

✓ 12 ~~Ipomoea~~ Operculina venticosa
common climbing over trees

~~June 10 Mt. Lasso, Tinian. [illegible] slope, abandoned~~
~~June 10 Lamp Chuno, Tinian.~~

✓ abandoned camp site.

✓ 13 Digitaria ciliaris
open ground

✓ 14 Cosmos ~~sulphu~~ sulphureus
open ground

✓ 15 Argemone mexicana
open ground, large colony

spreading tree 8 m. tall, flowers white, fruit
— thick, bicarinate.
small tree 4 m. tall, leaves thin, dark green,
— fruits green
shrub 2 m. tall, fruits
— dark green to black.
great herbaceous vine many meters long, almost completely covering trees.

decumbent with ascending ~~[illegible]~~ scapes, plant very blue-glaucous, hairs
— glistening—
ray flowers intense orange

glaucous herb, flowers bright yellow, leaves white along vein

June 11 - Marpo Valley, Tinian I.
abandoned cultivated land
24816 Ipomoea ~~stolata~~
planted about old house site

17
solid stand on terrace of
deep black soil
18 Capparis cordata
common on small
makatea outcrops

June 11 - terrace above ocean
on s.e. side of ~~island~~ Tinian
Island grass-covered
terrace of deep black soil
with outcrops of dissected
coral or makatea, ~~[illegible]~~
weathered talus slopes at foot
of slopes with low brush
19 Portulaca oleracea
~~[illegible]~~ abundant in disturbed places
and along road on terrace
20 Vernonia cinerea
common on terrace in
disturbed places

shrub 2 m. tall, stems
branched principally
at base, not inflated,
- flowers lavender.
sterile, slightly
gray-green.

— low suffrutescent
herb, somewhat
scandent, leaves
glaucous; flowers
wilted at 11 a.m. (said
to have been at 9:00 a.m.).
fleshy, white; buds with
strongly gibbous, compressed
lower sepal; immature
fruit with 3 strong ribs,
stipes recurved.

~~Sibthorpia~~
of Thespesia, Myoporum,
Guettarda and several
other shrubs, with
Cassytha; Bikkia around
cliffs and limestone outcrops

fleshy, fls. yellow, about
1 cm. or less across.

erect, fls. purplish.

24821 Miscanthus floridulus.
dense small patch ~~2 m. tall~~
on terrace.

22 Rhynchosia calosperma Walb.
occasional in grass on terrace

23 Heteropogon contortus
common locally on terrace

24 Chrysopogon aciculatus
occasional on terrace

25 Cyperus
occasional on terrace

26 Cassia.
occasional on terrace

27 Abutilon
rare on lower slopes

28 Allophylus
rare on lower slopes

29
common on slopes

30 Polypodium scolopendrium
very common on slopes and
coral outcrops

31
rare, tufts in crevices on face
of ~~the~~ limestone cliff

32 Blechnum lanceolatum f. pubescens
common in small openings
on slope

33 Achyranthes aspera
occasional small patches

34 Wedelia biflora var. [illegible]
common around slopes and at
foot of cliffs

canes 2 m. tall, forming
dense brake.

prostrate vine,
— mostly sterile.
stems weak, recumbent

small tufts

~~flowers~~ low bush, 0.8 m.
— tall, fls. yellow.
suffrutescent herb.

scandent shrub,
— fls. white
low bush 1 m. tall
— stiff, only seen sin. bud.
fronds erect, ~~leathery~~

small tufts

prostrate herb with erect
branches, corolla pale purple,
— dropping very easily.
stems spreading, elongate,
ascending at tips, staminal
— tube deep crimson.
prostrate, tangled elongate
stems, fls. yellow.
leaves with slight porty appearance

24835 Bikkia
common on and about foot of limestone cliffs

36 Heliotropium anomalum H. & A.
rare on ledges of limestone

37 Emilia sonchifolia
common generally

38 Bikkia
common on and about foot of limestone cliffs.

39
common on slopes

40 Portulaca ~~pseudofida~~ australis
rare on slopes

41 Myoporum bonynense Koidz.
very common on slopes

42 Zoysia matrella terrifolia Merr.
common on slopes, in places forming a carpet.

43 Lepturus repens
common on slopes

shrub 1-2 m. tall, leaves thick, leathery, glossy, flowers white, almost odorless, margin of corolla revolute in age.

leaves fleshy, flowers white with yellow tube, honey-like odor.

flowers purple.

shrub 1-2 m. tall, leaves thick, leathery, glossy; flowers white, almost odorless, margin of corolla revolute in age

prostrate in exposed places, a low shrub in sheltered places. flowers yellow.

prostrate, plant fleshy, leaves somewhat compressed.

prostrate in exposed places, low shrub when sheltered, flowers white with honey-like odor; fruit deep magenta-purple when ripe, not angled.

not pungent.

small tufts.

24344 Hedyotis albidopunctata (Mers.) Fosb.
common on slopes

✓ 45 Oxalis corniculata var. repens
common on open slopes

June 11 Marpo Valley, Tinian I.
abandoned cultivated land.

✓ 46 Cassia occidentalis
one of commonest plants

~~Potalaria icosandra~~ Aleve mosa L
✓ 47 very abundant

48 Cyanotis
common

✓ 49 Physalis lancifolia Nees
common

June 11 west side of Island
"Palm Beach" Tinian I.
cliffs of limestone, covered with small trees, at bottom talus covered by Barringtonia asiatica, moist.

✓ 50 Tacca leontopodioides L.
small colony in shade on talus

✓ 51 Dioscorea bulbifera L.
rare on talus in shade

Tinian

prostrate, stems red, leaves fleshy; flowers white, lobes strongly divergent, narrowly oblong, throat closed with hairs; immature fruit fleshy. corolla tube ~~gradually dilated~~ at middle.

— prostrate, flowers yellow.

herb 1.5 m. tall, flowers yellow. Japanese were said to have used seeds as a coffee substitute.

— herb with rank odor, yellow flowers.

— flowers lavender, perianth tube long, petals unequal, deliquescent.

— herb, much branched, 0.7 m. tall, flowers pale yellow

Top covered by tall brush, fading to Scaevola out on point, then to open Zoisia flat, then to bare dissected limestone.

sterile

sterile

171 1946 Marianas Is.

24852 Barringtonia asiatica — Tinian
talus at base of cliffs, dominant — large tree 12 m. tall, flowers white, stamens pink distally. — fronds erect.

53
shade on talus at foot of cliffs

54 Asplenium
on cliffs

✓ 55 Cordia subcordata — trees 5 m. tall, (flowers on young growth), flowers brilliant deep orange. — fruit green.
common on cliffs

✓ 56 Digitaria ~~marianensis~~ — tufts
base on cliffs

✓ 57 Premna obtusifolia R. Br. (pointed lvs.) — ↑ bush 2 m. tall, fls. pale green, aromatic. leaves only slightly glossy.
common in brush at top of cliff

✓ 58 Tarenna sambucina — shrub 3 m. tall, fls. white, fading yellowish; fruit immature.
common in brush at top of cliff

same open coral flat at top of cliff on point.

✓ 59 Scaevola frutescens (Mill.) Kr. — low rounded bush 1 m. tall (getting lower toward point) — fls. white; fruit white, fleshy.
common, especially away from point

60 Callicarpa — low shrub 1 m. tall, flowers purple, ripe fruit deep purple.
common in edge of brush

✓ 61 Boerhaavia ~~diffusa~~ erecta — prostrate, reddish. leaves thin. — fls. pink.
~~sc~~ occasional on grassy flat

✓ 62 Heliotropium ~~anomalum~~ anomalum — prostrate, leaves fleshy, fls. white with yellow center, honey odor, (only one kind - deeply lobed, notes)
common on bare dissected coral

24963 Hedyotis albido-punctata — prostrate, fls. white, later narrow.
open dissected coral

64 Lida — prostrate
open dissected coral

65 Evolvulus — prostrate, fls. blue
open dissected coral

66 Zoysia matrella — forming a dense carpet.
dominant on open coral flat

67 Jasminum marianum H.C. — scandent shrub,
in brush at top of cliff

68 Uncaria curaszavica — fruit shining, black.
abandoned cultivated land

69 Pachybrys erosus — erect herb, corolla red,
in brush at top of cliff. — crown orange

70 Psidium guajava — vine climbing through
in brush at top of cliff, only occasional on island — brush, several m. long.

71 Psychotria marianensis — shrub 1.5 m. tall,
occasional in brush at top of cliff — fruit immature.

June 11 Mt. Lasso, Tinian.
forest on limestone bluffs surrounded by abandoned cultivated land.

72 Cordia subcordata — shrub 2 m. tall, leaves glossy, esp. on young growth, flowers white, ripe fruit red.

73 Ficus opposifolia — tree 5 m. tall, flowers white, fruit green, terete.
in pasture, almost strangled by Ficus

June 12 same

73 Ficus — large tree, fruit green when ripe
edge of cultivated ground

178 1946 Marianas Is.

24874 Heliotropium indicum
weed around house
✓ 75 Cyperus kyllinga
weed around house
✓ 76 Ricinus communis
cult. as ornamental
✓ 77 Cynodon dactylon (L.)
around house, well
scattered over island
✓ 78 Catharanthus roseus (L.) G. Don
in garden, but escaped
and well distributed
over island.
✓ 79 Echinochloa colonum
weed near house
✓ 80 Paspalum conjugatum
~~conjugatum~~ old cultivated
ground, most abundant
plant on island
✓ 81 Leucaena ~~glauca~~ leucocephala
very common in abandoned
land.
✓ 82 Urena lobata L.
occasional in abandoned land
83 Sida cordifolia
rare, in eroded place
✓ 84 Vigna marina
eroded land, widespread on island
✓ 85 Crotalaria saltiana Andrews
very common in abandoned land

86 Strongylodon
edge of cliff

flowers white with
— yellow center.
heads white.

shrub 2-4' m. tall.

forming dense turf.

erect suffrutescent
herb 0.5 m. tall.
flowers magenta
(other plants white)
— spreading from root
— crown.
rooting at nodes,
running, culms
erect.

shrub, 1-2 m. tall,
fls. whitish, anthers
salmon-buff.
— erect, plant reddish green.

prostrate sub-shrub.
extensive,
prostrate, peduncles erect,
flowers yellow, keel straight.
— herb 2 m. tall, flowers
yellow with brown
— markings on standard.
extensive vine, racemes
pendent, standard
deep maroon, wings & keel
lighter, almost crimson.

1941 1946 Marianas Is.

~~34~~ 87 Polyscias
limestone on top of cliff, shaded.

88 Polyscias
planted as ornamental

✓ 89 Casuarina equisetifolia
planted extensively for windbreaks

90 Polyscias
planted as ornamental

✓ 91 Codiaeum variegatum
planted as ornamental

✓ 92 acacia confusa
extensively planted for windbreaks

✓ 93 Calophyllum ~~[illegible]~~ inophyllum
planted as ornamental

✓ 94 Nicotiana tabacum
persisting from cultivation

✓ 95 Zephyranthes rosea
persisting from cultivation

✓ 96 Cerbera dilatata
top of cliff

✓ 97 Abrus precatorius
tangled in ~~to~~ vegetation at top of cliff

✓ 98 Pithecellobium dulce
common everywhere

June 12 Camp Churo, near center of Tinian I.

99 Ficus
around buildings

shrub 2 m. tall, leaves glossy, plant with slight odor.

erect shrub 2 m. tall, fruit blue-gray, rubbing to black.

tree 8 m. tall

erect shrub, leaves stiff, crinkled.

erect shrub, leaves spotted with white.

small rounded tree

tree 8 m. tall, flowers white, fragrant.

herb 1 m. tall, flowers pink, herbage sticky.

dense cushions, flowers bright rose pink.

tree 5 m. tall, flowers white, pinkish in tube.

vine climbing in trees, seeds red and black.

tree, branches ascending, sterile.

banyan type but trunk not very well developed. tree 18 m. tall, ripe fruit purple.

June 12 - Officers Beach, e. side Tinian.
sandy beach surrounded by coral limestone bluffs sand covered by Ipomoea pescaprae, Tournefortia etc. - bluffs with Lemphis with a few other shrubs
+ Hedyotis

24900 Malvastrum coromandelianum
roadside, one of principal weeds in abandoned fields.

✓ 01 Amaranthus viridis
roadside weed, common

✓ 02 Cleome indica
one of commonest weeds on island, roadside

✓ 03 Hibiscus tiliaceus L.
in forest back of cliff, common

✓ 04 Cenchrus echinatus
common roadside weed, found everywhere

05 Ipomoea alba L.
very abundant in forest behind bluffs

✓ 06 Thuarea involuta
on sand back of beach

✓ 07 Terminalia
on limestone bluffs, exposed

✓ 08 Hedyotis albidopunctata (Nen.) Fosb.
limestone bluffs

scraggly woods ~~along~~ bluffs covered by great growth of Ipomoea alba and Passiflora foetida

flowers yellow

prostrate

spreading tufts.

small tree 4 m. tall, leaves very dark above, white beneath. spreading tufts.

great vine almost smothering trees.

prostrate, forming a loose mat.
- shrub 1.5 m. tall.
- fruit very young
prostrate! stems red. flowers white. leaves fleshy

24909 ? Ipomoea pes-caprae
sandy beach

✓ 10 Trinnfetta procumbens
sandy beach

✓ 11 Wedelia biflora var. [illegible]
common on sandy beach

12 Ficus
lower face of bluff

✓ 13 Heliotropium anomalum H. & A.
sand at foot of bluffs
not common. (with # 23914)

✓ 14 Heliotropium anomalum H. & A.
sand at foot of bluffs,
not common (with # 23913)

15
common along trail in bush

✓ 16 Scaevola frutescens (Mill.) Krs. var ?
common on bluffs

June 13 North Air Field,
Tinian.
coral flat becoming
very rough toward the sea
covered by large patches
of Verbesina, Pemphis,
Heliotropium anomalum,

extensive prostrate vine,
rooting in sand, flowers
bright purple.
— extensive creeping
prostrate branched vine.
— prostrate, extensive,
flowers on ascending
branches, yellow.
leaves fleshy.
— shrub 1.5 m. tall,
— fruit immature.
prostrate to ascending,
lvs. fleshy; flowers yellow
with white lobes,
— slight honey odor.
— prostrate to ascending,
leaves fleshy; flowers
white with yellow center,
— strong honey odor.
— stem prostrate, branches
ascending, corollas
— lavender, falling very quickly,
small shrub (others large)
flowers with central
third of lobe purple,
fruit immature.

etc., with Hedyotis albidopunctata between. Myoporum
here and there

24917 Heliotropium anomalum H. & A.
rough coral, forming almost pure stands of many square meters each.

✓ 18 Capparis sandwichiana
on raised blocks on rough coral flat

✓ 19 Hedyotis albido-punctata
in small cavities in rough coral

✓ 20 Portulaca oleracea
common along disturbed roadside

✓ 21 Pritchardia [illegible]
top of coral bluff, back of flat south-east of air field

✓ 22 Fimbrystylis insularis (L.) Hillebr.
roadside west of air field

plant fleshy, prostrate to ascending; flowers white with strong yellow center, honey scented, scandy or not dimorphic.

— subscandent shrub, leaves ~~so~~ fleshy, somewhat glaucous, minutely viscid glandular but not pubescent; at 8:30 a.m. some flowers wilted, those in shade still open, obviously a night-flowering species, flowers cream-white, fragrant.

— prostrate to ascending, stems red to green, leaves fleshy; flowers white, lobes patent, elliptic-ovate.

— plant fleshy; flowers yellow, 1 cm. across, stamens about 20, fls. closed ~~at about~~ 11 a.m.

— tree 8 m. tall, lactiferous; leaves thinly arachnoid sericeous beneath.

June 13 "Broadway", s.w. of
Yellow Beach
abandoned cultivated land
✓ 4923 Clitoria ternatea
covering solid patches
in field near road.

✓ 24 Annona muricata
roadside tree
✓ 25 Artocarpus altilis
tree around old home-site
26 Cucurbita
persisting after cultivation

✓ 27 Morus
around old house site
✓ 28 Luffa cylindrica
persisting after cultivation

✓ 29 Acalypha wilkesiana
roadside ornamental

✓ 30 Cajanus cajan
persisting after cultivation
~~31 Ledge near foot of~~
31
ledge near foot of limestone cliff
✓ 32 Pipturus argenteus
foot of limestone cliff
common in forest

vine matting ground,
flowers deep blue,
white toward base
— of petals.
tree 5 m. tall, fruit
— large, prickly.
tree 2 m. tall, lactiferous.

prostrate vine, leaves
flecked with gray,
— flowers orange.
tree 5 m. tall

prostrate vine, inflo-
rescence erect, flowers
— bright ~~[illegible]~~ yellow.
shrub 2 m. tall, leaves
various shades of
red and orange-red;
styles red.
bush 2 m. tall

June 13 "Broadway" n.e. of Yellow Beach,
easternmost ~~[illegible]~~ hump of 2nd line of cliffs
soft stemmed, thick stemmed
shrub 1.5 m. tall, leaves
— young, buds green.

small tree 4 m. tall,
at.

June 13 - Mt. Lasso, Tinian I.
around old shrine grounds,
now abandoned

24933 Canna
planted ornamental

✓ 34 Lonicera tipuanica
planted ornamental

✓ 35 Clerodendron thompsonae
planted ornamental

~~June 13 Camp Churo, Tinian I.~~
~~24 Cordia lucidula - jobi~~
~~roadside weed~~

✓ 36 Ceiba pentandra
roadside tree

June 13 Camp Churo, Tinian I.
~~[illegible]~~ abandoned cultivated region

37 Cordia lachryma - jobi
roadside weed

✓ 38 Bougainvillea ~~spectabilis~~ glabra
planted as ornamental

✓ 39 Sorghum ~~vulgare~~ bicolor
persisting after cultivation

herb 1.5 m. tall, flowers
brilliant scarlet, fruit
maroon, tuberculate.
leaves erect, gray and
green mottled, the
form with white
edges growing nearby.
berries orange red
wing, calyx white,
corolla deep blood-red

~~[illegible]~~
tubes spotted gray.

tree 8 m. tall, ~~[illegible]~~
branches perpendicular
to tall straight trunk,
widely spaced; fruit pendent.

fruit lead black when
young, then pearl gray.

scandent shrub, bracts
magenta, flowers white.

erect 1.5 - 2 m. tall.

Euphorbia heterophylla (not so common), Asclepias curassavica (not so common), Clerosia indica, Portulaca oleracea, Cenchrus echinatus, Amaranthus spinosus, A. sp. (less common) Cyperus stuppeus, Cassia occidentalis, Vernonia cinerea (less common), Phyllanthus niruri, Dactyloctenium sp. Eragrostis amabilis (less common). More local are Ipomoea indica (?), Ipomoea sp. (24797), Cynodon dactylon, Clitoria ternatea, Tricachne insularis (rare), Echinochloa colonum, Catharanthus roseus, Cyperus kyllinga, Urena lobata, Triumfetta semitriloba (Hosaka coll.) Physalis sp., Polanisia icosandra (abundant in Marpo area, important host for insect pests), Oxalis, Chrysopogon aciculatus, Argemone mexicana, Chloris inflata, Eragrostis sp. (rare), Amaranthus (24730) Aeschynomene indica.

Where the land has been abandoned longer bushy patches are appearing, with Jatropha gossypiifolia, Leucaena glauca, Psidium guajava, Indigofera suffruticosa, Passiflora foetida, Carica papaya, Lida sp. (24779, 80) Morinda citrifolia, Annona squamosa. These places are usually smothered by Passiflora foetida and sometimes Ipomoea (24812)

Operculina ?? Sida ?? Emilia sonchifolia Desmodium triflorum Paspalum conjugatum (rare)

Pithecellobium dulce Delonix regia

Old house sites may be detected by small groups of Artocarpus, Musa, Ficus, Terminalia catappa, Annona muricata, Morus (rare), etc. Nicotiana tabacum.

Vigna marina and Ipomoea pes-caprae form occasional patches inland especially where the top-soil has been removed by bull-dozers or erosion. They are, of course, common on the coast.

The Japanese, after they had completely destroyed the natural forest vegetation, found the wind detrimental to their agricultural activities on the bare plateaus that remained. To correct this extensive wind-breaks of Casuarina equisetifolia and Acacia confusa were planted. These remain. In the broad strips of Acacia there is absolutely no undergrowth, not even ferns, grasses or mosses. I did not examine a similar planting of Casuarina. Ceiba pentandra was planted along some of the roads.

In the fields, persisting from cultivation are great quantities of Saccharum and Pennisetum purpureum. Little traces of Zea, Raphanus, Lactuca, ~~Chinese~~ Brassica (Chinese cabbage), Cucumis sativus, C. melo, Cajanus cajan, Sorghum vulgare remain, other than a few scattered plants. Cucurbita pepo, Lagenaria siceraria, Luffa acutangula, Momordica cucumerina, Cosmos sulphurea (?), Catharanthus rosea persist more abundantly. The U.S.C.C. papaya patch is still in good shape and produces quantities of fine "solo" fruit. Also papayas are spontaneous all over the island. A citrus grove of sour oranges and limes planted by the Japanese lies in the north side of Marpo Valley, but has now grown up somewhat to other trees.

Common plants cultivated around camps, etc. are Pseuderanthemum eldorado, P. atropurpureum, Graptophyllum pictum, Catharanthus

roseus, Delonix regia, Cassia glauca, Bauhinia monandra, Acalypha wilkesiana, Codiaeum vulgare, Polyscias fruticosa, of several fancy forms, P. guilfoylei, Canna hybrida, Annona muricata, Artocarpus altilis, Terminalia catappa, Calophyllum inophyllum, Zephyranthes rosea, Clerodendrum thompsonae, Ficus communis, Ipomoea erecta, Alpinia speciosa (rare), 2 sp. of Bamboo (rare), Antigonon leptopus (rare), Ipomoea quamoclit, Annona muricata, Jatropha multifida, etc. Most of these were doubtless brought by the Japanese and some of the very specimens now cultivated were planted by them, as their size attests. Coconuts are rare.

The different levels are separated by escarpments of rows of limestone bluffs which are covered by a thick forest excepting on some too-abrupt places. Where there is no forest a rare shrubby growth of Bikkia, Psychotria mariannensis etc. is found. This is usually

not far from the ocean. The forest is of Ochrosia sp., Cerbera sp., Psychotria marianensis, Cynometra sp., Melanolepis multiglandulosa, Pisonia grandis, Pipturus argenteus, Guamia cadia rubescens, Erythrina sp. about 2 or 3 sp. of Ficus, Aglaia (Hosaka coll.), Morinda citrifolia, ~~[illegible]~~ ~~with [illegible] sp.~~, Premna, Colubrina asiatica, a variable population of Canthium, Polyscias sp. (24837 rare), 2 rare unident. sp. (24921, 24931), tangled with ~~[illegible]~~ Ipomoea (24812), Abrus precatorius, Mucuna gigantea, Strongylodon, Passiflora foetida, etc. There is little or no under growth in these forests except where disturbance has taken place.

Ammona squamosa, Callicarpa sp., Bikkia sp.

A somewhat similar forest appears on outcroppings of dissected coral on the flat lands. Ficus seems to be more common here. Albizzia sp. is common, possibly naturalized.

Camptha

The original vegetation of the terraces may have been similar to this, but probably richer in species.

On the terraces toward the bows of these cliffs, and especially toward the sea cliffs the soil thins out to nothing. Before it has thinned to nothing a somewhat similar forest occurs, but with the addition of Tarenna sp., Wikstroemia sp. and with Premna more common. It is gradually reduced to brush where the soil becomes too thin. The brush has many of the same species as the forest Premna, Ochrosia, Eugenia, Canthium, Psychotria, Colubrina, Ammona, Callicarpa, etc. Added are Bikkia marianensis, Phyllanthus sp., Capparis cordata, Cassia sp., and, at low altitudes, Scaevola frutescens and Pemphis acidula, unident. bush (24829), Myoporum, ~~etc.~~ Polypodium scolopendrium.

Clerodendron sp.

Camptha

Thespesia populnea id.

On the high cliffs on the west side a better development of forest exists, especially on the talus at the base, where Barringtonia asiatica is dominant, with some Pandanus. Here the soil is moist and ferns, Tacca, Dioscorea, etc. grow in the shade.

On the cliffs, Cordia subcordata is very important. Asplenium, Polypodium scolopendria, Hedyotis foetidus var. mariannensis, ~~and~~ Digitaria mariannensis, ~~are found~~ and Phyllanthus sp. are found commonly.

On windswept headlands ~~a~~ an extreme strand vegetation ~~[illegible]~~ is found. This is on coral rock usually quite dissected and with little soil. Inward there is a belt of Scaevola, Capparis, Callicarpa, etc becoming lower and giving place to abundant Myoporum, Heliotropium argenteum, Zoysia matrella (common, forming carpets), Vicia, Lida sp. (24867), Hedyotis albidopunctata, Evolvulus sp. The relative abundance and distribution of these varies from place to place. ~~On the sea~~ At low altitudes Pemphis acidula enters the picture, often as a dominant over large plots, also Terminalia catappa, Wedelia biflora, Excoecaria (?), Messerschmidia argentea, Thespesia populnea, etc.

On a terrace ~~of~~ on the s. e. side there is deep black soil almost completely covered by dense

Fimbristylis cymosa (?)

growth of a grass that may be Sporobolus virginicus (24817) with a dense patch of a reed (24821), patches of Heteropogon contortus, Achyranthes, occasional Vernonia cinerea, Portulaca ~~tuberosa~~ oleracea, Chrysopogon, Cyperus 2 sp., ~~other~~ etc. Above on weathered talus slopes this gives way to the brush described on p. 197 with Myoporum, Bishop Polypodium, Eugenia, Canthium and 24827 important, and added #24839. Wedelia, Abutilon, Allophyllus, Achyranthes, etc. toward the sea cliffs at the n. e. end, very prostrate Myoporum 24839, Hed. albidop. Zoysia, Leptinus repens and Oxalis corniculata dominate the ~~veg~~ vegetation. Toward the rest of the cliffs elsewhere are occasional outcroppings of dissected coral with Capparis principally. The deep soil of the terrace was cultivated in sweet potatoes by the Japanese.

On the few beaches Ipomoea pes-caprae, Wedelia biflora, Vigna marina, Triumfetta procumbens, Digitaria mariannensis

Messerschmidia argentea, Scaevola frutescens, etc. are important.

The vegetation of the island may be briefly summarized as a stark vegetation, becoming more extreme in exposed places near the ocean and becoming more luxuriant and mesophytic inland and in sheltered places. It has been really altered by man, especially on flat, tillable ground.

June 9 - Mt. Lasso, Tinian)
around buildings

Gin 24940

on rotting wood

" "

on rotting wood